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THE DETERMINANTS OF INFANT FEEDING PRACTICES IN SELECTED AFRICAN COUNTRIES

Some Implications of TNCs Activities */

*/ This paper was prepared by a Consultant to ECA. The views expressed herein are those of the Author and do not necessarily represent the views of this Organization.

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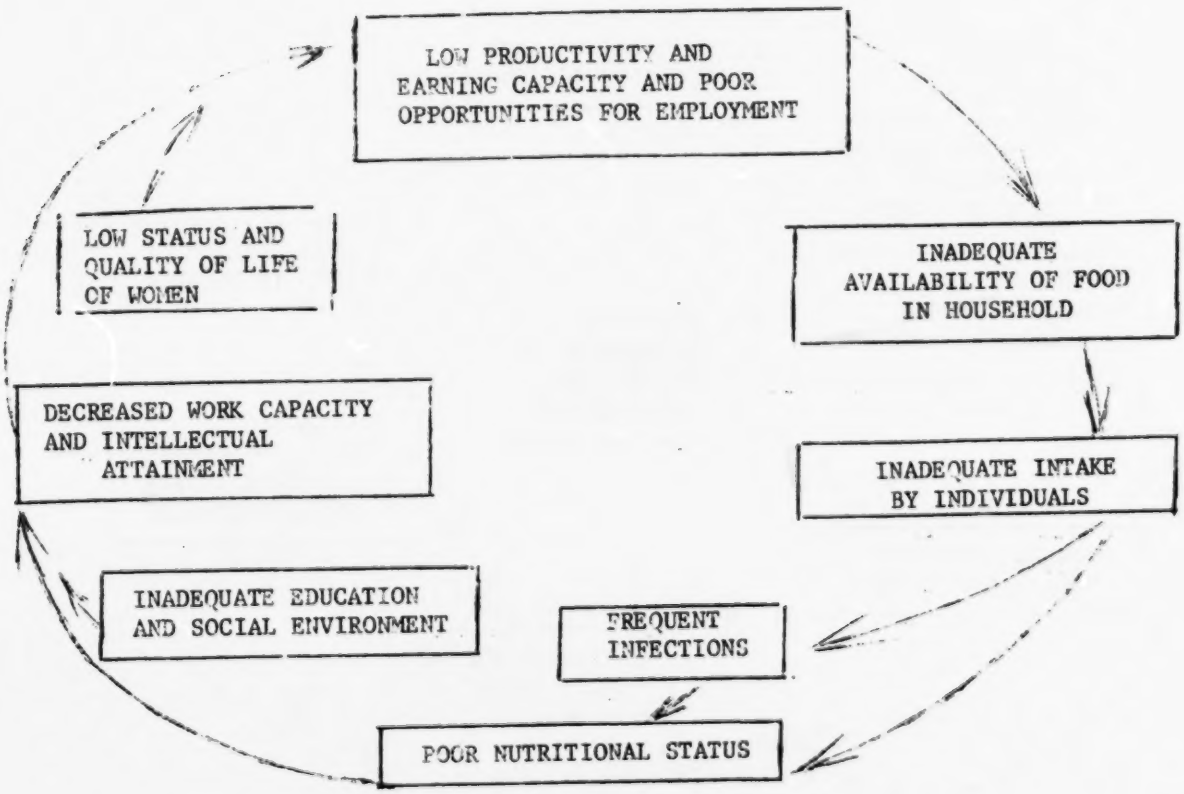
INTRODUCTION

1. Malnutrition is a major problem in developing countries. It increases the severity of illness and contributes to high rates of infant and child mortality. Among children, it limits the realisation of their full potential. Among adults, it is an important factor affecting productivity. Protein-energy malnutrition, which is due to inadequate intake of both protein and energy, is widespread among infants, children and women, particularly during pregnancy and lactation. There are also other deficiencies such as iron, Vitamin A, Vitamin B and iodin which contribute to low birthweight, blindness and impaired learning, especially in the context of social deprivation.

2. Malnutrition is mostly prevalent amongst the poorest population groups, and is reflected in the difference in rates of infant, child and maternal mortality, which occur between social groups within a country. Malnutrition is the end result of a number of environmental, social, economic and political processes (Figure 1).

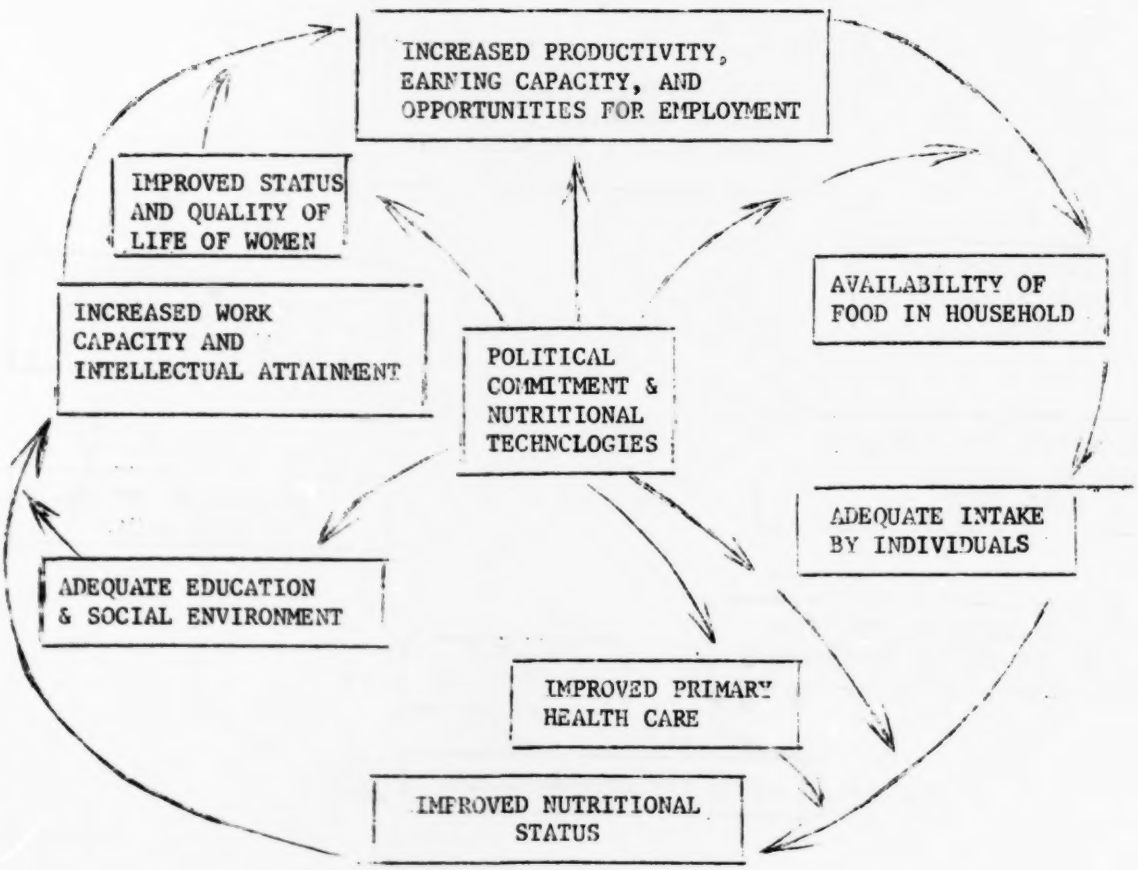
FIGURE 1: The Cycle of Malnutrition


LOW PRODUCTIVITY AND EARNING CAPACITY AND POOR OPPORTUNITIES FOR EMPLOYMENT
INADEQUATE AVAILABILITY OF FOOD IN HOUSEHOLD
INADEQUATE INTAKE BY INDIVIDUALS
FREQUENT INFECTIONS
POOR NUTRITIONAL STATUS
INADEQUATE EDUCATION AND SOCIAL ENVIRONMENT
DECREASED WORK CAPACITY AND INTELLECTUAL ATTAINMENT
LOW STATUS AND QUALITY OF LIFE OF WOMEN

3. There are countries facing massive nutritional problems today, such as Ethiopia, due to famines, wars or drastic changes in social policies on a background of chronic under-development. On the other hand, Zimbabwe, a food surplus nation, has a comparable level of malnutrition caused by inequitable food production distribution together with other multi-faceted factors.

4. Evidently there are many factors which act at a family, community, district and national level, which affect nutritional status. An analysis of infant practices which in itself requires an overview of the nutritional status in a country, has to consider constraints facing poor communities and their underlying causes operating at these various levels. These approaches are recognised as central to the strategy of Primary Health Care and Health for All. (Figure 2)

FIGURE 2: Strategies for Breaking: The Cycle of Malnutrition and Promoting Health and Nutrition


INCREASED PRODUCTIVITY, EARNING CAPACITY, AND OPPORTUNITIES FOR EMPLOYMENT
IMPROVED STATUS AND QUALITY OF LIFE OF WOMEN
AVAILABILITY OF FOOD IN HOUSEHOLD
INCREASED WORK CAPACITY AND INTELLECTUAL ATTAINMENT
POLITICAL COMMITMENT & NUTRITIONAL TECHNOLOGIES
ADEQUATE INTAKE BY INDIVIDUALS
ADEQUATE EDUCATION & SOCIAL ENVIRONMENT
IMPROVED PRIMARY HEALTH CARE
IMPROVED NUTRITIONAL STATUS

5. At the crux of promoting better health lies the establishment of breast feeding. In the 1970's, the issue of infant nutrition was brought to the fore by the aggressive sales promotion of transnational corporations in the marketing of breast milk substitutes. This contributed to a decline in breast feeding in favor of bottle feeding. Under the socio-economic conditions in which most families in developing countries are living, the high cost of breast milk substitutes plus the risk of the use of contaminated water for their formulation, results in recurrent diarrhea, malnutrition and death. Concerted action towards rectifying this situation resulted in the WHO Code of Marketing Breast Milk Substitutes in 1981. Since then many countries have adopted the Code within their legislature.

6. There have been encouraging advances following the massive publicity surrounding the introduction of the Code, and the sales of breast milk substitutes has decreased, particularly in developing countries. However, the situation is not one for complacency. The prevalence of malnutrition remains high, particularly in the second and third years of life. Figure 3 shows that there are many determinants of breast feeding practices, alluding to all facets of life. This is the approach that has been taken in this report.

FIGURE 3: The Determinants of Infant Feeding Practices

SOCIAL & CULTURAL FACTORS

- Ethnicity
- Family Composition
- Social networks and reference groups
- Values & beliefs
- Social mobility aspirations
- Education of the mother

MARKETING

WOMEN'S WORK

ECONOMIC FACTORS

BIOLOGICAL FACTORS

- age of mother & child
- parity
- sex of index child
- use of contraception
- health status of mother & child
- birth intervals

PREVIOUS BEHAVIOR

- Infant feeding experience

KNOWLEDGE of infant feeding

ATTITUDES towards infant feeding

INFANT FEEDING PRACTICES

- Decision to initiate BF
- Decision to use BM substitute

INFANT NUTRITIONAL & HEALTH STATUS

- Decision to start solids
- Decision to stop BF
- Choice of weaning food

7. Transnational corporations, especially companies who appear to monopolize the markets of the countries in this report, have profound impact in developing countries. Apart from the direct effects of the marketing of both breast milk substitutes and weaning foods, the latter which are often too expensive for the majority of the population, these companies also have branched out into other areas of production. Their role in other facets of life may be considerable. Since the colonial period, transnational corporations have played a decisive role in determining production and trade of African primary commodities. The transnational corporation control large-scale agriculture and the production of cash crops for export, mining and extractive industries. Since production and trade in African primary commodities as controlled by transnational corporations, African governments continue to be vulnerable to manipulation. The transnationals exercise monopolistic and oligopolistic power by buying out indigenous competitors and fixing prices at the international commodity exchanges. The access of African countries to the markets of developed nations is also controlled by transnational corporations, which also influence the policies of their home governments.

8. Central to infant feeding practices is the mother. The UN Decade for Women heralded a new awareness of the status of women and the vital role they play in development. The view taken in this report gives kudos to the central position of women, their role in society, their activities both at home and at work, and their contribution towards development. External influences of political, economic and cultural nature have also been considered as they affect the mother-child dyad.

GENERAL CONCLUSIONS AND RECOMMENDATIONS

9. Malnutrition remains a major problem in all the developing countries covered by this report. The solution of the problem lies in the appreciation of its multi-factoral causes, which result from inequalities in every facet of life. It follows that solutions require a broad base for there to be impact. The Primary Health Care Approach should be linked equally with efforts to improve agricultural output, develop food technologies, the wider access to appropriate education, the improved status of women and their absorption into mainstream development efforts. In particular:

(a) Legislation should acknowledge the equal rights of men and women particularly with respect to contractural agreements and land inheritance.

(b) Improvement in access to education should also incorporate curricula which are appropriate to prepare the country's citizens for an active role in development.

(c) The Primary Health Care approach should be strengthened so that all the people of the country are reached. Logistic support is paramount to the continued success following first initiatives.

(d) Growth monitoring programmes should be aggresively implemented in order to determine and monitor the magnitude of the problem of malnutrition.

(e) The identification and acknowledgment of malnutrition per se is insufficient. This has to be supported by supplementary feeding programmes, initiatives to encourage the community to grow the necessary nutrient foods, and fundamental changes within the agricultural systems. There is a pressing need to acknowledge women's role in agriculture and aggressively pursue appropriate technologies to ease the labour intensive practices that are being used. It is only by relieving the work burden of women that they will be in a better position to feed their children and absorb the necessary education to improve the quality of their lives.

(f) There is also a role for the development of a locally produced nutritious, cheap, easily available culturally acceptable weaning food. This has been achieved in Ethiopia, with the production of "Faffa". The introduction of such a food is of paramount importance in countries which have an unbalanced diet. However, in isolation, it is not a solution to the problem of infant feeding.

10. The situation as regards breat feeding versus infant formula seems to have improved considerably over the last eight years since the introduction of the WHO Code of Marketing. However, formula milk and inapropriate instant weaning foods are still easily available. Thus transnational corporations although not so overtly promoting these practices still continue to have an impact. Nestless have far and away the largest share of the market in the countries surveyed. However, it is encouraging to see the increase in the promotion of breast feeding, most noticeably in Zimbabwe.

11. Transnational corporations continue to play a prominent role in the economies of these countries. In Zimbabwe, they control large sectors of the economy. In Zambia, their current role is less decisive because they are operating primarily within the parastatal system. However, they have considerable influence on the market copper prices, the mainstay of the economy. In Ethiopia, the role of transnationals is minimal under the present political system.

12. The situation of women is central to the issue of infant feeding. Although the UN Decade for Women has brought to the fore the pivotal role of women in development, there remains need for further legislation to remove discriminatory practices and the continued promotion of women's needs with their inclusion in development efforts on an equal basis.

ZAMBIA

A. OVERALL SETTING

13. Zambia is located in southern-central Africa and is a landlocked country sharing common borders with eight countries: Tanzania, Malawi, Mozambique, Zimbabwe, Botswana, Namibia, Angola and Zaire. The country has an area of 752,620 square kms, making it the 16th largest state in Africa. Zambia's farthest points on a north-south or west-east axes measure nearly 2,000 kms apart. The vastness of the territory raises serious problems for the national development effort especially in view of low population densities. The estimated population of Zambia in 1985, based on population projections, was 6.44 million, 49 per cent of which was estimated to be below 14 years of age (1).

14. From Zambia's total area, there is potentially 42,000,000 hectares of arable land (1). Up to 10,000,000 hectares are irrigable, but only 10,000 hectares have so far received irrigation systems. There are three main seasons: The rainy, warm wet season (November-April), the cool dry winter season (May-August), which corresponds to the harvest time, and the hot dry season (September-November). Throughout the year the temperatures vary from a low of 14°C in the winter to 32°C in the hot season. In recent years, particularly since 1980, the country has experienced devastating episodes of drought.

15. The geographical location of Zambia in Southern Africa has serious implications for her economic survival. Imports and exports are shipped mainly through Tanzania on the Tanzania-Zambia railway or through Zimbabwe, Botswana and Mozambique. The long transport distances involved have the effect of increasing costs of all freight, especially minerals which account for over 90 per cent of Zambia's exports.

B. ECONOMIC BACKGROUND

16. Zambia is undergoing a severe economic crisis with a negative growth in the economy, which depends almost solely on the exploitation of copper and other minerals. Between 1965 and 1974, copper formed one-third of the Gross Domestic Product. In the early 1970's, the copper prices declined, so that by 1975-1978, it only raised one eighth of the GDP (3). The agricultural development of the country has suffered from the colonial government's bias towards spending most of the country's resources on mining operations to the detriment of economic diversification.

17. The deteriorating economic situation in the country led to interventions by the International Monetary Fund (IMF). In 1978-1979, the IMF condition for Zambia to have access to IMF funds was that imports must be procured from the nearest, cheapest source, i.e. South Africa. Over the past ten years there have been three devaluations of the local currency (kwacha) resulting in a loss of value of at least 50 perccent (2). In 1985, the kwacha, at the instigation of the IMF, was allowed to float and be put up deteriorating economic situation.

Decline of the GDP has meant that many government goals could not be implemented. Where there is negative growth in an economy, the reduced resources available to various social groups are usually not proportional and depend on the group's bargaining power.

18. The colonial government's bias against investment in rural development has led to migration, particularly of young men, to the cities.

TABLE 1: Distribution of Population

Year	Total Population	Rural	Urban	% Urban
1963	3,490,000	2,774,000	716,000	20.5
1969	4,057,000	2,865,000	1,192,000	29.4
1974	4,677,000	3,014,000	1,663,000	35.6
1980	5,679,000	3,239,000	2,440,000	43.0

Source: Neube, PD(1983), Agricultural base data for planning, National Commission for Development Planning, Government Printers, Lusaka.

Table 1 shows the high percentage of the population living in urban areas. Zambia is the third most urbanized African country. 67 per cent of the urban population is in the Copperbelt, and 40 per cent of the population lives within 40 kms of rail links.

19. Falling copper prices in the early 1970's and rising oil prices, resulted in a foreign exchange crisis. In 1975, which was the beginning of the rapid economic decline of the country, there was also a decline in real terms of trade in relation to urban terms of trade. In 1975, the rural population was only 3.2 per cent better off than in 1970 and by 1979, the rural population's position had fallen below that of 1970. Prices increased from 100 per cent in 1970 to 248.5 per cent by 1979 (5).

20. The state of the economy is at the root of many of the problems which are facing Zambia at present. The problem of malnutrition, is, of course, linked to the cost of living, among other contributing factors. The price income index for lower income households has increased from 100 per cent in 1970 to 322.6 per cent in 1981. This negates any small gains in income terms (Table 2).

TABLE 2: Cost of Living Indices

Year	High Income Households	Low Income Households	All Households
1970	100	100	100
1975	142.0	139.7	140.0
1980	269.0	283.4	281.5
1981	296.9	322.6	319.3

There are certain points which require clarification as regards to the above price indices (5).

(a) The rate of increase in the cost of living prior to 1974 was consistently lower for low income households in comparision to high income households.

(b) After 1974, there has been a high rate of increase amongst low income households.

(c) The substantial increase in the cost of living for low income households in 1981 over 1980 is accounted for by the removal of subsidies on some essential commodities.

21. Employment is regarded as a major indicator of economic performance. A source of income is required to provide for basic needs, and the number of persons employed compared with those that could be employed can be used as a measure of difference between actual production and potential production. There is lack of statistical data on employment, one of the reasons being the large number of people functioning within the informal sector. However within the formal sector there has only been marginal growth over the last 10-15 years (5).

22. All effort at national development have been thwarted by the stagnation of the economy. The 4th National Development Plan aims to diversify the country's exports in order to increase export earnings and promote self-sufficiency in food. These objectives will be fulfilled by:

(a) The restructuring of agriculture and the agro-based industries;

(b) The integration of the domestic economy through the systematic development of inter-sectoral linkages;

(c) The intensified development of agriculture, mining and manufacturing sectors.

These objectives will be pursued through the national ideology of humanism, with socialism as the instrument (2).

23. The focus of socialist national development planning is on the implementation of a policy of rural development. This demands the total mobilization of the people for active participation in their own development process at the conception, planning and implementation levels. As will become clear in further sections, women are ill-equipped with the necessary skills to participate fully.

24. It was not possible to obtain a complete listing of multinational companies operating in Zambia, but the majority operate within the parastatal system. Information gleaned from the INDECO Annual Report (1987), one of the two main parastatal conglomerates, shows the following partners in it's enterprises. (Table below):

Country of origin	Multinational	Local Company	% Share
Canada	John Lablatt	Zambia Breweries	20
U.S.A	Phleps Dodge		
	Svenska Metallverken		
	International Corp.	Zamefa	20
Liechtenstein	Amenital	Kafue Textiles	20
United Kingdom	Henrichs Syndicate	National Breweries	49
	Tate & Lyle	Zambia Sugar Co. Ltd.	11
	Covilink	Kafironda Ltd.	30.5
	Cobar	Kafironda Ltd.	15
	Thirty-three		
	Nominees Co. Ltd.	Kafue Textiles	10
	Commonwealth		
	Development Corp.	Kafue Textiles	12.5
		Chilanga Cement Ltd.	27
	British Oxygen	Zambia Oxygen Ltd.	49
	Abercorn Nominees	National Milling Co.Ltd.	13
	Spillers Ltd.	National Milling Co.Ltd.	13
	Duncan Gilbey &	Duncan Glibey &	
	Matheson	Matheson Zambia	34
	Dunlop	Dunlop Zambia Ltd.	77
West Germany	Coutinho Caro	Kapiri Glass	
		Products Ltd.	9
Italy	Fiat	Livingstone Motor	
		Assemblers Ltd.	20
	Intersomer	Lusaka Engineering	
		Co. Ltd.	20
	Piacenza	Lusaka Engineering	
		Co. Ltd.	20

As would be expected the major transnational companies operating within the country are of British origin. It was extremely difficult to determine the influence of companies such as Lonhro and Angola-American within the country's economy.

International banks operating within the country are Barclays, Standard Chartered Bank, Grindlays Bank and Citibank. There are no foreign companies manufacturing breast milk substitutes within the country. The only company which appeared to be manufacturing weaning food was Speciality Foods in Kitwe, a subsidiary of Rowntrees and McIntosh.

C. HEALTH STATUS AND SERVICES CONDITIONS

25. The general deterioration in economic conditions, periods of drought, unfavourable rural/urban terms of trade, rapid population growth and increasing trends in urbanization, have all contributed to a situation which threatens the health status of the people and the health services. There are alarming trends in nutritional status, increasing disease mortality, falling immunization coverage and worsening health service indicators.

TABLE 3: Health Service Indicators

Population	6,440,000
Age Distribution 14 years	49.6%
Infant Mortality Rate	97/1000 livebirths
Crude Birth Rate	49.7/1000 population
Total Fertility Rate	6.9
Population Growth Rate	3.1%
Life Expectancy at birth	males 50.4 years
	females 52.5 years
Access to protected water	47%

Source: Government of Zambia/UNICEF (1986), Situational Analysis of Children and Women in Zambia

26. The major problems relating to child health are the following:

(a) The five major cause of death are acute respiratory tract disease, diarrhea, malnutrition, measles and malaria.

(b) Acute respiratory tract disease is the principal cause of death in the first year, respondible for 13-14% of deaths.

(c) Diarrheal diseases are the second most important cause of death in the first year.

(d) The incidence of malnutrition rises sharply after the first year and is the principal contributing factor towards death. There has been an alarming increase in the amount of malnutrition between 1978 and 1984, from 29% to 43% of deaths. However, caution should be applied regarding the child health problems for the following reasons:

- Mortality data from hospitals only represent about 20% of the total deaths occurring in the country;
- There is no system of birth/death registration and therefore it is difficult to determine mortality trends;
- There are wide variations depending on the source of the data.

27. There is a difference between the pattern of hospital admissions and the causes of mortality, indicating malnutrition per se is not a predominant cause of hospital admission. Malaria figures as the most frequent reason for admission to a health institution.

28. The government of Zambia has adopted the strategy of an integrated programme of health care, particularly in the rural areas. This will be implemented through improvement of basic health care, improvement of environmental and sanitary facilities at the primary level. With these aims in view, the 10 year National Health Plan (1972-1981) was drawn up to ensure that every Zambian would be within 15 kms of a health center by the end of the decade. However, although 3 per cent of the GDP was allocated to health during the decade, actual expenditure has fallen short of that figure together with many of the ideals expressed in the National Health Plan (2).

29. There is a complex relationship between women's economic activities, their health status and that of their children. Women's health and nutritional status affects their children in that a women whose health has been undermined by frequent attacks of malaria, for example, in combination with frequent child bearing and poor nutritional status cannot be expected to make a good economic contribution to her family. Illness in females accounted for 77 per cent of all recorded illnesses in a survey in one rural area. Women spent the greatest amount of time on domestic chores followed by being sick, and finally in agricultural production (11).

30. Zambian infant mortality figures compare with other low-income countries in Africa. Similar trends are shown in the disparity of the figures between urban and rural areas as shown on Table 3. Highest levels of infant mortality have been recorded in Eastern Luapula and Western Province. There is also interurban variation with infant mortality estimated to be three times higher in squatter colonies around Lusaka (2).

31. As many other studies have shown, infant mortality is affected by the surrounding life situation of the family. There is an inverse relationship between the formal schooling of the mother and child survival. The father's education plays an important role in that with higher educational attainment, the socio-economic status of the family is better with improved housing and access to medical care. The stability of the family appears to be also related (12).

32. There has been little evidence of a decline in the high mortality rates over the past 5 years with an increasing incidence of malnutrition, anemia and malaria (2). Here again the economic situation is of paramount importance in

its reflection on the cost of living, the availability of essential drugs and the decrease in the delivery of preventative health measures.

33. The Expanded Programme of Immunization (EPI) was launched in 1978. Evaluation of the first eight years of coverage shows disturbing trends. In 1980, 40 per cent of children were fully immunized, but by 1984, this had decreased to 35 per cent. There is also disparity between urban and rural coverage. The PHC Evaluation shows that in Lusaka 51 per cent of children were fully immunized in comparison to 35 per cent for the rest of the country. The apparent failure of the programme has been attributed to a variety of factors including lack of proper management; break in the "cold chain"; lack of transport and shortage of skilled staff. There also appears to be lack of motivation and understanding amongst both health workers and mothers on the importance of the EPI programme, with a high drop out rate (2). A well functioning EPI programme together with concomitant health education is an important component in the prevention of childhood diseases and malnutrition.

34. Measles is a serious health problemme in Zambia and continues to be a major cause of mortality in children. In 1982, 71 per cent of total hospital deaths and 10 per cent of deaths of children under the age of 1 year were attributed to measles. Measles is related to malnutrition in that poorly nourished children are more likely to die from measles (2).

TABLE 4: Malnutrition Hospital Admission for Children time Trend 1973-1982

Year	Admissions Malnutrition	% of Malnutrition	Deaths due to malnutrition	% Deaths due to Malnutrition	Case Fatality Rate/1000 Admissions
1973	6975	5.0	1151	11.8	165
1974	7100	4.9	1128	10.6	158.8
1975	7566	5.2	1053	10.7	139.1
1976	9014	5.7	1422	13.1	157.8
1977	10049	6.0	1586	13.7	157.8
1978	12253	7.2	2275	17.9	185.7
1979	10158	6.2	1931	16.8	190.0
1980	11582	6.2	2170	18.1	187.4
1981	11624	6.4	1959	17.2	169.0
1982	14231	7.3	2788	22.0	196.0

Source: MOH(1982), Country Health Profile, 1978, Government Printers, Lusaka.

35. Over a ten year period (1973-1982) admissions with malnutrition have risen from 5.0 per cent to 7.3 per cent with an increasing case fatality rate. In recognition of the worsening situation as regards protein-energy malnutrition, a national nutritional surveillance programme was started in 1979, funded by UNICEF (13). This was expanded in 1980 with funding from the Swedish International Development Agency (SIDA). In general, the effects of the National Nutritional Surveillance Programme (NNSP) have not reached expectations for a number of reasons:

(a) Due to limited understanding of growth monitoring by health staff and mothers, the activities are seen as merely a recording exercise.

(b) Transition from the pilot stage to a national level took place quickly without the availibility of adequately trained staff.

(c) Weight and plotting are carried out by untrained staff. There is also poor organization within the clinic structure with lack of staff motivation.

(d) Nutritional surveillance is only justifiable if clearly defined interventions are identified and appropriate resources for implementation are available.

(e) Until 1987, there were no tangible interventions for children identified to be growing suboptimally. Interventions merely consisted of nutrition and health talks, some cooking demonstrations and the promotion of vegetable gardening. In February 1987, a supplementary feeding programme was initiated through the World Food Programme in three districts of North/ Northwestern provinces.

36. Recognition of some problems has led to the creation of a Nutrition Unit within the Ministry of Health. In 1986, a National Intersectoral Workshop, with representation from the Ministry of Health, Ministry of Agriculture and Water Development, Ministry of Labor and Social Welfare, Ministry of General Education and Ministry of Higher Education, was a first attempt at controlling malnutrition. A review of the development of the National Health Information System between the Government and SIDA has resulted in further plans for strengthening the system.

37. The importance of malnutrition within the country has also been appreciated through the creation of the National Food and Nutrition Commission in 1967. The Commission has the following objectives:

(a) To reduce mortality directly or indirectly due to malnutrition in children and focus public attention on the nutritional needs of children and youth.

(b) To improve the nutritional status of vulnerable groups.

(c) To create community awareness of the serious impact of malnutrition and instil public confidence in the solutions of the problem.

(d) To reduce the incidence of malnutrition by providing highly nutritious food at all seasons of the year.

(e) To make provisions in relation to nutrition for the rapidly growing population.

(f) To provide adequate diets in institutions.

(g) To incorporate the concept of improved nutrition in food and agricultural development planning.

(h) To take all necessary steps to facilitate the implementation of the Government's approved policy in relation to National Food and Nutrition.

(i) To initiate studies in food and nutrition and make recommendations.

(j) To arrange for execution of work either directly or through agencies, in relation to subjects dealing with food and nutrition which are not a ministerial portfolio.

(k) To establish a nutrition library.

(l) To maintain statistics on national nutrition.

38. The results expressed in a position paper from the Commission (14) over the 20 years since its creation (1967-1987) are disappointing. There has been little governmental material support, with less than one-third of the requested budget being allocated to the Commission in 1987. Achievements, however do include:

(a) Regular features in both national newspapers, radio programmes in the seven main languages and a Nutrition Newsletter.

(b) There have been a number of food consumption and nutritional surveys. These have all confirmed the high prevalence of protein energy malnutrition, anemia, hypoyitaminosis A and riboflavin deficiency. Suggested causes for these are insufficient caloric intake, a diet deficient in protein and essential vitamins and minerals,poor hygiene, parasitic infections, large household dependency with 50-59 per cent of household members below the age of 4 years, high illiteracy rate amongst women, poverty,inadequate labour force with a low level of agricultural commercialization, poor storage of foodstuffs and transport and marketing problems (14).

39. In 1984, a nutritional survey confirmed the continuing deterioration in the nutritional status of the population. The persistent shift to maize as the main dietary staple has aggravated this general situation. Maize prepared as the traditional porridge "sadza" has a low protein and high carbohydrate content. Moreover, because of its bulk, maize is a poor weaning food for small children. The survey also found evidence of seasonal household food shortages which coincided with the period of high energy requirement. This is affected by the predominance of feamle headed households in many rural areas who suffer from insufficient labour and is also a key factor in the area cultivated by each family (15).

40. Despite the identification of a number of pressing problems related to the high incidence of malnutrition, there have been few tangible advances in implementing recommended remedial measures. In 1980, a low cost infant weaning food was developed but commercial production was never achieved. Nutrefex an instant baby porridge, was developed in conjunction with the National Council for Scientific Research. This comprises of maize, dried skimmed milk, sugar, vitamins and minerals. It is manufactured by Speciality Foods Ltd. (Kitwe), who are a subsidiary of Rowntree and McIntosh. The product has never been marketed on a large scale, possibly because of the high cost to the consumer (16). There has also been some work on the use of germinated cereal flour which has a high energy density, but, as yet, there have been no significant developments towards the commercial production of a cheap easily available weaning food, which is also culturally acceptable (16).

41. In conjunction with interventions for severly malnourished children, nutrition groups, founded by "concerned citizens" were started from 1968 onwards. Of the original 33 groups Nutritional Rehabilitation Villages were also established usually attached to non-governmental organizations. An evaluation of these nutritional groups and rehabilitation centres (17) showed that only 14 group remaind active by 1980, and there were only 6 nutritional rehabilitation centers functioning throughout the country, four of these connected to mission hospitals. There has been a lack of communication between all these groups and the National Food and Nutritional Commission. The high failure rates of these types of groups has been mainly caused by the absence of a steady source of funding. There has also been little evaluation of the efficiancy of the programmes, as well as little relationship with the Ministry of Health. There is a dire need for expansion of community-based nutritional rehabilitation units. These should be coordinated with the National Food and Nutrition Commission and the Ministry of Health.

42. Drought has affected the country significantly over the past five years. This has been especially critical since the affected areas were those with the largest agricultural output (Eastern, Central and Southern Provinces). In a health implications of drought in Zambia, 49 per cent of children were malnourished (2).

TABLE 5: Average Prevalence Rates of Drought-Related Diseases Observed in Zambia 1980-1984

Disease	Prevalence in worst drought area per 1000	Prevalence in Zambia
Malnutrition	22	11
Eve diseases	182	155
Skin diseases	51	96
Bilharzia	20	16
Malaria	364	205
Measles	16	8
Diarrhea	236	375
Tuberculosis	6	3
Anemias *	1	10

* Adult women only

Source: MOH(1984), Health Implications of the Current Drought in Zamibia, Ministry of Health, Lusaka

43. The situation has been further aggravated by shortages of drugs such as chloroquine, oral rehydration solution, vaccines and food supplements. The general lack of water also adversely affects health.

44. A survey of some shops in Lusaka showed that formula milk was rarely available, and very expensive. There was only one type of formula milk available (NAN), imported from Zimbabwe.

45. Weaning food was available but there was little variety. Cerelac, produced by Nestles Zimbabwe, was readily available at 18.5 kw/box. An instant pre-cooked cereal, manufactured by Lyons, was the only available and commercially locally produced weaning food found. The labelling directly contravened the WHO Code by advocating bottle feeding.

46. Recently, a survey of child rearing practices (19) was carried out in eight of the nine provinces in the country. The data collection was based on interviews on 740 adults. Certain important facts were highlighted in this report:

(a) Child mortality figures showed that although over half of the deaths occurred within the first year, deaths in the 2nd and 3rd years of life were common.

TABLE 6: Age-specific Mortality

Age	% Child Mortality
≤ 1 Year	52
2 - 3 Years	24
3 - 4 Years	14
≥ 5 Years	10

Source: Chibuye, PS, Mwenda, M. and Osborne, C. (1986), Child Rearing Practices in Zambia, UNICEF/ZARD study, Lusaka.

(b) The causes of death were attributed to:

Diarrhea	18%
Malaria	14%
Measles	11%
Witchcraft	11%

(c) Over half of the babies were delivered at home (59%). Traditional care of the umbilical cord involved the application of ash and soot (78%)and animal dung (12%).

(d) Breast feeding was practiced in the vast majority (97%) but there was a disturbing tendency to introduce breast milk substitutes often with a bottle (68%). 38% of mothers interviewed used infant formula.

(e) In 53% breast feeding was continued to 18 months, with a further 42% continuing into the second year.

(f) Problems were again identified during the weaning period. Breast feeding was abruptly stopped in 47%. The most frequent method of weaning was directly from breast to food (72%). 71% of the mothers weaned their babies off the breast within 7 days. Supplementary feeding, ususally a maize porridge, was started by half of the mothers between 4-6 months. By 1 year, 87% had introduced supplementary feeding, and many children were able to eat by themselves.

(g) The inter-relationship between family size and malnutrition is well recognized. Zambia has an accelerated population growth with a low acceptance of child spacing methods. 44% of women interviewed in this study wanted between 5-10 children. Only 5% of the mothers were using contemporary methods of contraception.

47. A breast feeding association was founded in Lusaka in 1982. The members are volunteers who promote breast feeding mainly on a personal counselling basis. The La Leche League is active in Kitwe. Impact of these organizations at a country level appears to be minimal.

48. The high fertility rates and absence of an officially articulated policy on the regulation of fertility have led to an accelerated population growth. The Crude Birth Rate has increased from 47.7/1000 population in 1969 to 49.7/1000 population in 1980. The total fertility rate is 6.9 children per woman. The high level of urbanization has not led to any decrease in fertility. The increase in the child: woman ratio from 795/1000 women in 1969 to 877.4/1000 women in 1984 means that women have to cope with greater marital responsibility as the number of children increases. Socio-economic factors such as education and economic activity have a bearing on fertility levels. The fertility rate amongst women without any formal education was 7.4, a figure twice as great as those with university education (3.5). Those with secondary education however, still show a high fertility rate of 6.4(20). In a study on attitudes towards the desired number of children in Chiefteness Nyanje's area, only 7.3 per cent of women were using modern contraception methods. The average family had 8 children. The number of children was a source of prestige, labour and security in old age (20).

TABLE A : Implications of Fast Population Growth on Age Structure

	1984	1999
Projected population	5,680,000	10,320,000
Population ≤4 years	1,224,000	1,871,000
	(i.e. absolute increase of	647,000 or 52.9%)
Population aged 5-9 yrs.	increase of	57.8%
10-14 years	increase of	63.3%
Total dependency burden	97.1	94.2
Women 15 - 49 yrs	1,450,000	2,330,000
	(i.e. absolute increase of 1.45 million or 60.3%)	

TABLE B: Projected Percentage Distribution of Population Age Groups 1984-1999

AGE (yrs)	1984	1989	1994	1990
0 - 1	4.2%	4.1%	4.0%	3.9%
1 - 4	14.8	14.6	14.4	14.2
5 - 9	15.3	15.2	15.1	15.0
10 - 14	12.4	12.7	12.7	12.7
15 - 64	50.7	50.7	51.1	61.7
65 +	2.6	2.6	2.7	2.7

49. The above two tables shown an alarming population growth rate. Even under the assumptions of declining fertility and declining mortality, the population will remain an essentially young one with those aged below 15 years making up 46 per cent of the total population for the next 15 years. Of this poulation, the under fives will make up roughtly 40 per cent, the 5-9 year old, 33 per cent and the 10-14 year old 27 per cent.

50. The implication of this fast population growth is that by 1999, the population of Zambia is expected to double, with an absolute increase in children below the age of 4 years to 53 per cent of the total population. Therefore the potential clientele for MCH serviees will increase, and thus government expenditure in real terms will also have to increase. But, given the high current levels of fertility, and the national per capita expenditure on MCH, services are bound to decline still further.

51. The rapid population growth also has implications for the rural/urban balance. Despite the fact that unemployment amongst men may be as high as 30 per cent in some urban areas, there is a continual migration of young men to the towns. The fast rate of urbanization has led to the establishments of squatter settlements with population densities 4-5 times greater than the national population density. High population density leads to substandard housing, lack of adequate piped water, and inadequate sewerage. This is reflected in the high infant mortality in these settlements (2). Committment of funds to improve these situations would further exacerbate rural/urban inequalities.

52. Women in urban areas, whose husbands are unemployed are driven to develop survival strategies by joining the informal sector of employment. In rural areas there are a disproportionately higher number of female-headed households. The women with their limited resources and heavy family responsibilities are unable to exist beyond bare subsistence levels. The absence of men sometimes compels women to enter into polygamous marriages and temporary unions.

53. Women's role in the production of material wealth and in reproduction must be assessed in relation to the particular history of the country. In Zambia there are two parallel bodies of law: customary law, which is ethnic specific with roots in the pre-colonial past; and statutory law. The two legal systems particularly affect women's rights and obligations in marriage, divorce or on her husband's death. The law applied in Local Courts today in Zambia is not necessarily completely traditional since it has been modified during the penetration of Western culture into the country.

54. Customary law treats women as perpetual dependents. The woman has no communal property. Both herself and all she produces belongs to her husband. The conception of a wife as an asset controlled by men was enhanced by the spread of a cash economy. On the death of a husband, all his possessions, including his wife and children, are inherited by the husband's relatives (25).

55. Statutory law does confer some advantages on women. Monogamous marriages are the rule and marriage or divorce can be arranged without the family's consent if both parties are over 21 years of age. The woman has a right to share communally all held property. Divorce is more difficult to obtain and would require financial means to support the legal process. In reality, most Zambian women deal with customary law (25).

56. Married working couples are taxed as a unit with all marriage and child allowances attached to the husband's income. This means that the woman's income is disproportionately taxed. Application for tax modification to share tax benefits is possible but women argue that this is discriminatory since application requires the husband's permission.

57. Following the UN Decade for Women, considerable though fragmented efforts have been made to improve the status of Zambian women. However, women's interests have not been integrated into large scale development programmes. Many small scale projects have been started to cater for women's perceived needs (27).

58. The economic roles of women in contemporary Zambia are changing because traditional support structures no longer function. The majority of women, irrespective of marital status, have to bear major economic responsibilities. Since the majority of women are uneducated and ill-equipped with skills, and the labour market unable to generate sufficient employment opportunities, only a small percentage obtain waged employment (28). Only 7.3 per cent are employed in the formal wage sector (29). The majority of women in urban areas work in the informal sector, whereas, 60-80 per cent of women in the population are subsistence farmers. These activities have major implications on the health of the family and on infant feeding practices. Although women are fulfilling a major role in production and the maintenance of their families, the majority are silent participants in the economic life of the country and as such represent a very under-priviledged group (22,24).

59. There are major constraints aggravating women's low level of production and economic viability. Disparate entering skills, unequal access to factors of production such as land, labor, capital and efficient technologies, all contribute to the persistent marginalization of women's position (30).

60. The provision of water for the family is one of the daily time-consuming tasks of women. An evaluation of the involvement of women in rural water supply projects in Western Province, to determine why the new water supply was not being utilized, indicated that implementation of the project has been through traditional leaders within the community, with little consultation with women, the principal utilizers. Concomitant health education regarding water pollution and health related hazards had not been given (31).

61. Women do not own land in their own right but can acquire the use of land through marriage, relatives or the village headman. Widows and divorced women have no further claim on land obtained through their husbands. Family plots are controlled by husbands and women are given only a small area for independent cultivation, from which she should obtain the food for the family. Women's agricultural productivity is constrained due to the small areas of land of inferior quality which are given to them, in scattered holdings where there is little chance to utilize irrigation.

62. Female-headed rural households have severe labor problems. Family labor is the main source of labor on subsistence and small scale farms. Women put a higher labor contribution than their husbands, working longer hours, as well as cultivating their own independent plots. Women-headed households have less accessibility to labor and therefore are unable to grow labor-intensive crops. Thus a narrow range of crops are produced with lower yields. There is also less integration into cash crop production than in male headed households who have labor input from multiple wives. An evaluation of the Village Agricultural Programme for Northern Province, paints a pessimistic view in the future of the program, through which free seeds and fertilizers were distributed to promote maize production. Initially there was 40 per cent woman participation but this

rapidly declined. The evaluators felt that any programme which encourages women to follow cash crop production, a man's domain, would not have a productive future(32).

63. Profitable women's participat on in agriculture is further hampered by discriminatory credit facilities. Women are unable to take advantage of credit facilities because of their lack of collateral (e.g. in the form of land, equipment etc.). The complicated procedures also make it difficult for illiterate women. Socio-cultural biases against women negotiating with men outside the home are also important.

64. Women have limited access to any knowledge of efficient production techniques. Illiteracy is a major handicap, and, so far, the functional literacy programme has limited coverage. Dissemination of agricultural information is mainly to men. Thus women, who already have a heavy workload, spend longer hours on arduous agricultural tasks and follow inefficient production techniques. Not only does this reduce their yield but also it takes time from child rearing, leading to an increase in malnutrition (33).

65. The Chikuni Fruit and Vegetable Producers' Cooperative developed from the Chikuni Nutrition Group in 1970 to encourage the growing of locally produced fruit and vegetables to be processed either into jam or to be dried at the nearby local mission. In 1984, there were 70 members, 45 per cent of whom were women. The Cooperative has been successful in encouraging land ownership by women, as well as their participation in extension services (34).

66. Similar constraints affect women in the urban informal sector where they similarly do not have access to lending agencies. They are unable to obtain commodities in bulk and therefore often use middlemen subsequently paying higher prices. They spend long hours trying to procure merchandise, are disadvantaged because of the weather, and face police harassment because, more often than not, operate without a license. They tend to concentrate on food peddling which is a highly competitive market. All these factors cause their businesses to yield only a small profit margin. During the woman's efforts to obtain even this small degree of economic self-sufficiency, care of the children is compromized.

67. The LIMA programme, which was started in the late 1970's, extended facilities to obtain hybrid strains and fertilizers. It has been suggested but not well-documented that the nutritional status of women and children is worse in those that participate in the programme because there has been a significant shift to cash crop production (35). A study of women's activities in an Integrated Rural Development Project (IRDP) area in Northwestern Province concludes that the LIMA programme has made little positive impact on women in an area where subsistence production is exclusively in the hands of women. On the contrary, the programme may actually have increased the workload. They suggest that production orientated programmes need to combat the problems of lack of basic commodities, lack of a woman's own income, lack of education and knowledge, high seasonal workloads, unequal distribution of labor and lack of mobility. To effect these changes assistance in technical and managerial skills is required (35).

68. In order to achieve Zambia's goal for the full utilization of human resources to promote higher productivity, food sufficiency and alleviate rural poverty, there must be acknowledgement of women's role in agriculture with specific interventions to maximize their effectiveness (33).

69. At the time of independence, there was a severe shortage of qualified Zambians. This was a result of the colonial educational policy which discriminated against the indigenous population, both in terms of gender and race. Women, in terms of access to formal education and training were disadvantaged and there was a high female dropout rate (37). Post independence there has been rapid expansion of educational facilities with a three-fold increase in primary school enrollment, and an increase of seventeen times in secondary school registration (2).

70. Whilst the educational system has the potential to contribute to women's progress, there are still particular problems which limit full participation. Although there is a 44-47 per cent total enrollment of girls at the primary school level, there is still a differential between boys and girls. In 1980, 94 per cent of boys (7-13 years) were enrolled as opposed to 82.5 per cent of girls. There is a high attrition rate amongst girls particularly between Grades 4 and 5 when girls are probably integrated into domestic chores and agricult ral production. The sex differential in enrollment is more pronounced in rural areas. At secondary school level, enrollment has increased in absolute terms but girls still only comprise one-third of the total number of students(2).

71. Educational reforms, proposed in 1977, to provide more relevant education have been reaffirmed by the UNIP in the National policies for the Decade 1985-1995. Previous confinement of girls to home science subjects, which maintain their marginal participation in development, will be altered to provide a wider base of knowledge with a bias towards science and technology (29).

72. Although the proportion of women enrolled in technical and vocational training has increased, 80 per cent of these are pursuing subjects such as secretarial and office work and home sciences. This sex stereotyping of subject specializations is an effective mechanism for legitimizing and reinforcing gender roles. The concentration of women in a few fields of training restricts their employability and creates marginal competition with men on the job market. Only 37.5 per cent of females are economically active as opposed to 71.5 per cent of males, and women form only 7.3 per cent of those employed in the formal sector (29).

73. There are still social constraints within the home which may hamper these curriculum changes leading to equal educational opportunities for boys and girls. Parental attitudes towards female education are less favorable than male education. Under conditions of economic hardship the family may not be able to bear the additional expenses for school (e.g uniform, books etc.) Also gender based socialization practices in the home reinforce the sex stereotyping in the educational system.

74. In the non-formal sector there is little data on actual illiteracy rates within Zambia. However, there is an estimated overall illiteracy rate of 52.2 per cent in the rural adult population. About 63 per cent of rural women are illiterate.

TABLE 7: Distribution of Illiteracy in the Rural Area by Province and Sex

Area	Total %	Male %	Female %
Central	46.9	35.5	74.5
Copperbelt	53.7	33.9	55.9
Eastern	61.8	48.5	71.6
Luapula	48.0	35.4	58.8
Lusaka	39.0	28.9	50.9
Norther	41.7	52.1	62.9
Northwestern	65.7	53.2	72.0
Southern	41.2	31.5	49.7
Western	60.2	48.0	67.7
Zambia	52.3	39.9	62.6

Source: Government of Zambia/UNICEF (1986), Situational Analysis of Children and Women in Zambia, Lusaka

75. Since it has been realized that illiteracy in mothers has unfavorable repercussions on the upbringing of the children and the general health of the family, concerted efforts must be directed towards reducing illiteracy amongst women so that they can fully participate in the development process and social change. Thus, of significance is a conference held in 1985 on Women's Rights at Mindole Ecunemical Foundation in Kitwe. The Conference called on the Ministry of Education and the Party to eliminate the gender stereotyping of children; to effect closer supervision on girls to reduce the attrition rate, and to provide appropriate reading materials for women who have achieved literacy. They also identified a greater need for coordination of work to combat illiteracy geared towards the eradication of protein energy malnutrition and common childhood diseases (2).[2]

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ZIMBABWE

77. Zimbabwe is a relatively small country covering an area of about 390,759 square kms. The Zambezi and Limpopo rivers respectively consitute her northern and southern borders. As a landlocked country, Zimbabwe lies between Zambia in the north, Botswana in the west, South Africa in the south and Mozambique in the east. The altitude varies from 300 to 1500m.

78. Although Zimbabwe lies within the Tropics, the normal tropical climate is modified by altitude. It varies from cool and wet in the eastern highlands, to dry and hot in Matabeleland, the valleys of the Zambezi and Limpopo rivers, and moderate in the High Veld Plateau. There are three main seasons:

- a dry winter (April-August) with cool temperatures, especially at night.
- a hot season (September to November)
- a wet season in which the main rains usually start around mid-November and continue until March.

79. The population was 7,517,000 in 1982 (1). 47.3 per cent of the population was below 15 years and 17.4 per cent below 5 years of age. Zimbabwe thus has a high child dependency rate. Despite its relatively lower mortality rate (3.2 per cent per year), Zimbabwe's population growth rate has remained high. Most tables put it at about 3.4 per cent per year, which means that the population of 8.4 million of today would double in 20 years. But the World Bank, having analysed census data, estimates the growth rate at 3.7 per cent per year, almost equal to Kenya's (4 per cent) and one of the highest of the world. The crude birth rate is 49 compared to 39.5 in 1982 (census). This would indicate that Zimbabwe is still amongst the countries were fertility remains comparatively high. The total fertility rate is 5.6.

80. The population density increased from 13.0 persons per square km in 1969 to 19.3 persons in 1982, which is higher than other African countries where the average for 1982 was 16.5 persons per square km. 26 per cent of the population live in urban areas (1982 census). Nearly 55 per cent of the urban population live in Harare and Bulawayo. The degree of urbanization varies widely between provinces. Whilst the rural population in Mashonaland east was only 43 per cent, the corresponding proportion for Matabeleland south was 97 per cent.

TABLE 1. Population, Area and Population Density by Administrative Units, 1982

Administrative Unit	Population	% of total population	Area (sq.km)	Population desnsity
District councils	4,276,900	56.68	169,556	25.2
Rural councils	1,571,349	20.82	167,442	9.4
Municipalities	1,673,057	22.17	1,921	870.9
Other areas	24,765	0.33	51,640	0.5
ZIMBABWE	7,546,071	100.00	390,759	19.3

Source: Central Statistical Office (1985), Main Demographic Features of the Population of Zimbabwe: An Advance Report on 10% (sample, central statistical office, Harare)

81. The majority of the population (56.7%) resides within district councils which consist of the communal lands and small scale commercial farming areas. The rural councils, which consist of the large commercial farms, service towns and resettlement areas include 20.8 per cent of the population. The remaining 22.2 per cent of the population is found in the cities managed by municipalities. The average population density in district councils is 2.7 times higher than rural councils, showing the much higher population pressure on the generally poorer lands.

82. Zimbabwe boasts of one of the most diversified economies in independent Black Africa. Among countries south of the Sahara, she ranks only second to South Africa as an industrial power. Except during periods of prolonged drought, such as that experienced between 1981-1984, the country is self-reliant and self-sufficient in food. Despite this enviable position, there is widespread malnutrition throughout the country, with as much as 30 per cent of the children below 5 years of ages showing stunting of growth (4). This figure is amongst the highest in Africa.

83. There is growing and widespread recognition that the prevalence of hunger and malnutrition is primarily, but not wholly dependent, not only on overall food intake but also on the ability of households to purchase food. Unemployment will leave many households with inadequate access to food, despite increases in food production.

84. Pre-independence, the overall infant mortality rate (IMR) was estimated to be 120-140/1000 livebirths. However this figure was quite misleading as there were wide disparities throughout the country (43).

TABLE 2: Infant Mortality (1979)

White population	14
Black population (Harare)	30-50
Black population (small towns)	50-90
Population rural areas	140
Most deprived areas	200

(All figures expressed as per 1000 livebirths)

Source: MOH (1984), Planning for Equity in Health - A Sectoral Review and Policy Statement, Ministry of Health, Harare.

85. The majority of infant deaths occur in the neonatal period, one third during the first week of life and the other half during the first months of life.

86. Recent estimates of infant mortality rate show some improvement with an overall rate of 79 per 1,000 livebirths; an urban rate of 51 per 1,000 and a rural rate of 93 per 1,000 (45). The child mortality rate is 7.4 per 1,000 (40). The principal causes of infant and child mortality, as in all developing countries are neonatal conditions, acute respiratory tract disease, diarrhea, measls and malnutrition. Statistically, Zimbabwe is one of Africa's healthiest countries, yet severe inadequacies still remain, especially regarding the infant mortality rate between urban and rural populations. Its relatively low infant mortality rate, relatively high life expectancy (55 years), place it much closer to Latin America than to the rest of Africa. But what the figures conceal is that in Zimbabwe today, malutrition is extensive. A World Bank survey of 1982 indicated that 20 percent of Zimbabwean children suffered from moderate to severe malnutrition, with 30 percent of children showing stunted growth. The Bank identified poverty as the main cause, and rural people as the main victims (41).

TABLE 3; Distribution of Registered Causes of Deaths, one months to one year age group, Harare, 1983 and 1984

Cause of Death	%(1983)	%(1984)
1. Pneumonia	28.5	36.6
2. Gastro-enteritis	23.1	21.1
3. Meningitis	9.3	8.3
4. Congenital anomaly	4.4	7.5
5. Malnutrition	0.8	3.8
6. Septicemia	3.9	3.4
7. Measles	18.1	3.0
8. Misadventure	1.8	2.3
9. Others	10.1	14.0

Source: Republic of Zimbabwe/UNICEF (1985), Children and Women in Zimbabwe - A situational Analysis, Harare

87. Infant mortality in Harare is much lower than rural ares, but the distribution of deaths by cause is of interest. In 1979, the main causes of registered infant deaths were prematurity, pneumonia and gastro-enteritis. Malnutrition is not mentioned as a cause of infant mortality per se. Prematurity and other causes of neonatal death do not appear in Table 4 which provides the distribution of causes of death from one month to one year. The main causes of death in that age group are pneumonia and gastroenteritis, followed by meningitis. Infant mortality from measles, which was very high during a quasi-epidemic in 1983, dropped considerably in 1984.

TABLE 4: Distribution of Principal Registered Causes of Death, one year to four years age group, Harare, 1983 and 1984

Cause of Death	% 1983	% 1984
1. Gastro-enteritis	16.7	22.4
2. Pneumonia	19.1	17.8
3. Malnutrition	8.2	16.2
4. Misadventure (home accident)	1.5	7.1
5. Measles	37.6	6.6
6. Meningitis	2.8	6.6
7. Malaria	1.5	2.1

Source: Republic of Zimbabwe/UNICEF (1985), Children and Women in Zimbabwe - A Situational Analysis, op.cit.

88. The main causes of child mortality in Harare in 1983/1984 were gastro-enterities, pneumonia, malnutrition and measles. There was a sharp increase in the number of deaths attributed to malnutrition in 1984.

89. Malnutrition is a serious problem in Zimbabwe. As in other sub-Saharan countries who share a predominantly maize diet, the peak of malnutrition presents itself during the weaning period. 18-22 per cent of children less than 3 years old, residing in rural areas showed evidence of malnutrition. The situation was somewhat better in urban areas, with a prevalence of 10-11 per cent (4). However, stunting is found in 28-30 per cent of children(below 90 per cent weight for height), a figure higher than any other African country (39).

90. Despite the high prevalence of malnutrition, infant and child mortality rates compare favorable with other African countries. The World Bank report (41) suggests that this discrepancy between mortality and nutritional indicators may be due to a combination of the following factors:

(a) Zimbabwe presents a relatively safe infection disease environment;

(b) Water accessibility: Although water supply is still uneven, it is better than many other African countries. In urban areas, there is easy accessibility to clean water but only 33 per cent of households in communal

areas have access to protected water in the wet season. The mean distance to domestic water source is 712 -1000 meters. The average daily consumption per family is 76.1 liters. Women spend an average of 1hr 40 mins fetching water during the rainy season, and 2hr. 30 mins per day during the dry season(39).

(c) Sanitation: Between 58 percent and 80 percent of households have no sanitation in the communal areas. However the situation is much better in urban areas.

(d) The rural Zimbabwean culture places high premium on cleanliness.

91. There is uneven distribution in the prevalence of malnutrition. The highest incidence is found in commercial farming areas, followed by the communal lands, the mining population and urban areas in that order. A study of children of commercial farm workers in Mashonaland showed that malnutrition occurred predominantly between the age of 6-23 months (33%). From 2-5 years, 21 percent of children were malnourished (47). The overall country incidence is shown in the following table:

TABLE 5: Malnutrition Among Children by Age Groups, 1982 (%)

Age groups (months)	Weight for age under 80% RHC		Weight for age under 80% NCHS		Height for age under 90% NCHS		Weight for height under 85% NCHS	
	Non-urban	Urban	Non-urban	Urban	Non-urban	Urban	Non-urban	Urban
0 - 6	4.4	5.9	4.4	5.9	20.3	11.8	11.8*	19.5
7 - 12	19.3	8.1	18.6	8.1	31.0	16.3	11.8	11.1
13 - 24	26.0	9.8	21.5	9.4	37.0	17.8	9.7	10.8
25 - 36	30.0	20.6	22.4	22.9*	47.1	19.1	5.3	10.3
TOTAL	21.6	10.5	17.7	11.0	35.6	16.1	9.1	13.5

RHC = Road to Health Chart (Zimbabwe Standard)
NCHS = National Center for Health Statistics Standard

* possibly a typographical error

Source: MOH (1984) Feeding Practices and Nutritional Status of Young Children in Urban and Non-Urban Areas in Zimbabwe (1982), Ministry of Health, Nutrition Department, Harare.

92. The age specific incidence of malnutrition is related partly to changing dietary patterns which are, in turn, related to changes in technologies and the economy of food production. Issues which need to be addressed when assessing the impact of industrialization and the alteration of eating habits are:

(a) To what extent are the change in dietary habits the cause or effects of the problem of hunger?

(b) What has been the impact of these changes on the ability of African countries to maintain their independence in the area of food supply?

(c) To what extent have policies to wean consumers from traditional feeding practices to new tastes aggravated the problem of mulnutrition?

93. Malnutrition is not a new phenomenon in Zimbabwe. The "compound diet" of the mines, which was geared to the subsistence needs of the single emigrant worker, led to "malnutrition being seriously prevalent even in urban areas, especially amongst factory workers." (42).

94. The pursuance by the state of a cheap food policy between 1965-1980, minimized competition between local food production and the agro-export sector. This policy also promoted the penetration of transnational capital into the wage food sector. The efficiency of capitalist crop production resulted in falling crop prices. Peasant self-sufficiency was undermined as technological change penetrated into the countryside leading to decreased per capita production (42). Between 1961-1971, communal cultivation increased by 88 per cent and the total area under cultivation increased to 91 per cent. There was a breakdown in disease control measures and heavy livestock loss during the war. This has led to perpetual undernourishment in these areas. In communal lands, the increase in maize production has been at the cost of a decrease in the production of groundnuts and millet. Maize with its high bulk and micro-nutrient deficiencies, has serious nutritional consequences to infants and small children.

95. In 1981, 5000 tins of formula milk had been sold, sufficient to feed 13890 infants. Surveys in communical areas indicated that 1 in 10 mothers fed their babies exclusively on breast milk substitutes. This situation was worse in urban areas with 1 in 3 mothers using formula milk. In one supermarket, sales rose three-fold during 1979-1980. Company representatives visited health institutions with free samples, calendars, "road to health" charts both in urban and rural areas (48).

96. In a workshop held in April 1987 on breast feeding and child spacing the Director of the National Nutrition Unit of the Ministry of Health, pointed a much more encouraging picture with regards to the use of breast milk substitutes (49).

TABLE 6: Percentages of Mothers Breastfeeding

Year	Urban	Rural
1982	50%	74%
1984	83%	95%
1986	85%	97%

Source: Tagwirey, I (1987), Current Breast Feeding Trend and the use of Breast Milk Substitutes. Paper presented at the workshop of breast feeding and child spacing, Kadoma, 1987.

97. The mean age of discontinuation of breast feeding was 18 months. Discontinuation prior to the age of 6 months was the result either of illness in the child or pregnancy in the mother. The least successful at breast feeding were the more well-to-do working mothers. In low density urban areas, 44% had stopped breast feeding by 3 months, in comparison to only 3% in the high density areas (49). However, this is not a situation for complacency. The mean age of introduction of supplementary milk formula was less than 6 weeks of age in the urban areas. Often solid foods were introduced around 2 and a half months leading to decreased frequency of breast feeding. In the rural areas, maize porridge was introduced as early as 3.8 months.

TABLE 7: Age of Introduction of Breast Milk Substitutes in Urban Areas

Age (Months)	Low Density (white)	Low Density (black)	High Desnity (black)
≤ 1 month	20.5%	27%	2.5%
≤ 5 months	48.7	70.2	19.0

Source: Tagwirey, I (1987), Current Breast Feeding Trend and use of Breast Milk Substitutes, op.cit.

98. The mean duration of breast feeding correlates with the educational level of the mother. Those mothers with no education tended to breast feed for longer (21 months) as opposed to those with secondary school education (16 months). Also mothers above 35 years of age tended to breast feed for longer than younger mothers (45).

99. A number of events have led to decreased use of breast milk substitutes, particularly in the rural areas (50):

(a) Through active health education, legislation and consumer groups, the amount of formula available has been minimized. Subsequent to the gross abuse of the WHO Code, as shown by the Ministry of Health Survey in 1981, an inter-ministerial committee was formed to study the International Code of Marketing of breast milk substitutes. This was followed by publication of Circular #30, 1982, Ministry of Health, by which all donations of breast milk substitutes had to be channelled through the Provincial Medical Department. The Public Health Amendment Act, 1985, covers the implementation of the WHO Code. Marketing practices, relating to both infant formula and complementary foods, feeding bottles, teats, product quality, legislation against advertisements and the promotion of breast feeding health education are all covered (51).

(b) There has been decreased foreign currency allocation for components of breast milk substitutes.

(c) There has been considerable increase in the unit price of formula, making it too expensive for many mothers.

TABLE 8: Cost of Breast Milk Substitutes in Zimbabwe

Name of Formula	Cost/tin (Z$) 1983	1987
Neslac	2.52	3.72
Nan	2.53	5.56
Lactogen	2.50	3.72

Source: Tagwireyi, I. (1987), Current Breast Feeding Trend and the use of Breast Milk Substitutes, op.cit.

100. Surveys of infant feeding practices and statistical data on the high incidence of malnutrition after the first year, highlight poor weaning practices. 40% of mothers introduced solid foods prior to 4 months of age. 9% of urban and 12% of rural mothers ceased breast feeding because of diarrhea. 23% of rural mothers believed that breast feeding could actually cause diarrhea (52).

101. The monitoring of a child's growth until at least 5 years is a useful tool for assessing the nutrition and health status of the child in particular and the community in general. It enables the identification of at risk children and communities so that resources can be maximized; allows for follow-up of children and timely intervention; and facilitates methods of assessing the impact of health interventions.

102. Growth monitoring, in comparison to other countries in this report, appeared to be well advanced in Zimbabwe, particularly in urban areas. Baseline MCH studies carried out in many districts throughout the country during an evaluation of PHC, indicated that over 90% of children below 24 months had a child health record. However, only 40-50% of these children had 1-5 weight points recorded during the first year of life (54). At independence, with the new government's thrust towards PHC and decentralization of health services, growth monitoring activities were expanded through the provision of scales from UNICEF, and an increase in the coverage of health services. In 1982, only 58% of children had 2 weight points during the first year. This had increased 83% by 1984, and over 50% of children and six or more weight points by 1987 (55).

103. The 1986 Report on Growth Monitoring (56) formulated certain conclusions:

(a) Growth monitoring is an important integral component of MCH and PHC activities.

(b) Levels of organisation should be identified and there must be provision for logistic support and the development of training strategies and materials.

(c) Although attitudes were positive on both the mothers and the health workers parts, there was a need to improve recording. Community mobilization was also necessary to extend services to the grass roots level, through village health workers, traditional birth attendants and pre-school teachers.

104. At indipendence in 1980, the health services of Zimbabwe were largely urban-based, and oriented toward the cure of disease after the struck. Rural areas, where most of the population lives, were neglected. PHC efforts are presently targeted at Zimbabwe's poorest groups - the families who labour on commercial or communal farms - who suffer more malnutrition and have less access to health care than any other sector of the population.

105. A country wide survey held in 1986-1987 showed that there had been considerable progress in the PHC field since the previous report of 1984. Two-thirds of all children were fully immunized; 90% of mothers had knowledge of sugar-salt solution for diarrhea, although only two-thirds could prepare the solution correctly. 50% of children had been weighted more than 6 times during the first year. 3 out of every 5 deliveries took place in a health institution. However, it is too early to determine the impact on morbidity and mortality of these improved parameters, but certainly the situation appears to be encouraging (55).

106. The world wide UNICEF's programme for maternal and child health, launched in 1982, aims in the next decade to cut by half the rate of death in children under five and in women of child bearing age. This approach is founded on the notion that improved conditions for women are essential for better community health. Among the basic elements of the programme are breast feeding and growth charts (growth monitoring).

107. Bottle feeding of infants increases their mortality risk, the increase to be as much as 30%. Substitute formulas are attractive to busy mothers. Giving the baby to an older child to bottle feed may allow the mother to complete other essential tasks. But breast-milk substitutes are nutritionally inferior, and do not pass on to children the mother's resistance to disease. Contamination and over-dilution of baby formulas lead to infection and malnutrition. Growth is a measure of health, yet slow growth is frequently not visible. The use of a growth chart, plotting weight gain and height against age, can make visible the slowing down of normal growth which takes place up to a year before a child's malnurishment is visibly obvious.

108. The conditions resulting in poverty and hunger are complex. As has been mentioned earlier, despite the fact that Zimbabwe is a food surplus nation, there is an unacceptably high level of malnutrition. This would imply that food supply alone is not the only criteria for the development of malnutrition. In fact, the mean caloric intake for Zimbabwe is 2576 calories, higher than the mean caloric intake for Africa (58).

109. In the ranking of malnourished groups, the commercial farms shows the highest levels of malnutrition, ranging from 10-47% (59). Of 227 children surveyed in Mashonaland, 24% were malnourished and 49% were stunted (42). In communal areas, as a result of enforced excessive human and livestock population, the resource base of these areas has been brought under prolonged stress making many households dependent on migrant workers remittances (42). In 1981, of 1000 families surveyed in the communal areas, 25% needed to buy some basic subsistence food and half of the families had no beans for consumption (60). In 1982, a survey of 92 agricultural extensions officers found that food was in short supply for 1-3 months of the year, and that in one third food was short for 6 months of the year (61). This picture is repeated in other surveys of communal lands. In the Chibi Peasant Farming area, 35% of families grew insufficient maize to last the whole year (58).

110. The situation has been further exacerbated by recurrent drought between 1981-1984. During the 1981/1982 drought, peasant farms produced one third of the country's 1.6 million tons of maize, but 80% was retained for home consumption. This still led to a dietary shortfall of 500 calories per person of the staple. The bulk of undernutrition represents a general energy lack because of inadequate supplementation with energy dense foods, such as groundnuts (59).

111. In order to get to the root of the problem of malnutrition, the historical background of the agricultural economy and its relationship to the other facets of the economy has to be examined. Zimbabwe is divided into five natural regions on the basis of soil type, rainfall and other climatic factors. The first three regions are suitable for intensive crop and livestock production whereas the remaining two offer limited scope for agricultural development (38).

112. The large scale commercial farms, the former European farming areas occupy close to 80% of the specialized and diversified farming and intensive farming regions, and 40% of the total areas of Zimbabwe. These farms grow predominantly cash crops such as tobacco, cotton and maize, largely for export.

TABLE 9 : Distribution of Land

Type of land	Region I-III	Region IV-V
Communal land	26%	74%
Large scale commercial land	51%	49%
Small scale commercial land	56%	44%
All land	35%	65%

LAND IN REGIONS I - III:

Communal land	30%
Large scale commercial land	58%
Small scale commercial land	6%
National parks and others	6%

Source: Central Statistical Office (1987), Statistical Yearbook, Harare.

113. Commercial farms are well organized and financed and produce most of the market surplus. There are approxiamtely 4,500 large scale farms with an average farm size of 2,200 hectares. The number of farms has decreased since independence. This can be partly accounted for by the government's redistribution of land in the resettlement program.

114. The role of commercial farms and their impact on the economy can be appreciated when looking at the tobacco industry. Flue-cured tobacco was introduced into Zimbabwe in the 1920's by one of the largest transnational companies - British American Tobacco (BAT). Zimbabwe has grown to become the largest exporter of flue-cured tobacco supplying one fifth of the world market. There are eight major transnational corporations which dominate the tobacco market, many of which are operational in Zimbabwe. Tobacco is the most profitable commercial crop with returns 2.6 times greater than cotton and 14.6 times greater than maize (62). There is a complex inter-relationship between the large tobacco transnational corporations, local buying companies and financial institutions,themselves also transnational corporations (e.g. Barclays, Standard, National Grindlays.)

115. Following the declaration of UDI, there was a slump in exports but auctions held behind closed doors continued despite sanctions. In this way, the transnational corporations could carry out very profitable business, offering a purchase price two-thirds below the current market price (62). The majority of the transnational corporations have major holdings in South Africa. Since 1975, all produce has been exported through South Africa.

116. The major companies engaged in the tobacco business center their activities on buying and manufacturing rather than growing the leaf. Therefore a relatively small share of their own capital is invested in Zimbabwe. There are three companies that own factories in Zimbabwe directly manufacturing cigarettes etc.: BAT, Rothmans and Carlton. Through local subsidiaries, BAT draw on local financing and governmental assistance to expand operations without bringing in extra capital (35).

117. Furthermore, transnational corporations, through complex international entanglements not only obscure their actual holdings but have also diversified into other major sectors of the economy, such as mining and other industrial enterprises.

118. Soon after Independence, the government announced a minimum wage (63). For agricultural workers the minimum wage is Z$ 55 per month, which is less than half the estimated poverty income level (2). Following this legislation, a large number of jobs in the agricultural sector were lost. It is estimated that this was about 51,00 between 1980-1982, and with a further decrease of 28% in 1983 (42). These unemployed laborers returned to their communal lands, thereby further aggravating the overpopulation problems in those areas, and decreasing their remittances to their families.

119. The tobacco farmers and commercial farmers in general, have a powerful lobby in the country and have kept agricultural taxation low. It seems probable that the transnational corporations, who purchased tobacco with a total income of $40.5 million in 1980, and $74 million in 1981, made vast profits. It would appear that the people of Zimbabwe received less than one fifth of the total value in wages and taxes generated by the tobacco industry (62).

120. Linked to commercial farms is the agro-based sector which produces about one quarter of the total output of the manufacturing industry. Many firms are under foreign ownership and the control of western-based transnational corporations such as Anglo-American, Spillers, Lonrho, Unilever, Nestles, Lyons and Brook Bond etc. The penetration of this sector by these large conglomerates and the consolidation of their interests demonstrates the economic and political fact that this strategic sector of the economic and political fact that this strategic sector of the economy is owned and controlled by foreign capital (64).

121. Women form the largest component of the casual and seasonal labor forces particularly in fruit and vegetable canning. Industrial employment regulations do not apply to seasonal labor. The companies employ deliberate strategies so that seasonal workers do not join the permanent work force by finding various mechanisms to evade the Food Processing Industrial Employment Regulations, which states that casual workers who are employed for longer than six weeks become permanent employees. Casual laborers are not eligible for any workers benefits.

122. Small scale commercial farms, the former African Purchase Lands, occupy 4% of all land. 75% of the farms are located within the semi-intensive regions where conditions for production are inferior to those on the large scale commercial farms. There are approximately 8,600 small scale farms with an average size of 134 hectares (38).

123. Resettlement areas are the products of post-independence government land redistribtuion efforts. The government buys land from the commercial farms areas and resettles farmers from communal lands. There are two types of resettlement, one based on a cooperative system and the other on a family basis. Communal land areas, the former Tribal Trust lands, occupy 42% of all the land. Almost 75% of the communal land areas are located in semi intensive and extensive regions. 57% of the population live in these areas, the majority being engaged in subsistence farming.

124. Nestles, through a local subsidiary plant (Food Specialities Pvt. Ltd.) has a monopoly over the sale of breast milk substitutes. At the time of the mission to Zimbabwe, there was little formula milk available in the shops. This was caused by a temporary shortage of packaging material, the majority of which is imported. Wyeth, whose products had been available at the time of the last mission to Zimbabwe looking at infant feeding practices, did not have a share of the market in Zimbabwe now (68).

125. The monopoly of the market was acknowledged by the company, when the consultant visited the firm. Detailed sales figures could not be obtained, but annual sales of breast milk substitutes were said to be about 400 tons (Nestlac, Lactogen, Nan). The production of NAN would be discontinued in 1988 because 54% of its ingredients were imported. The majority of sales were apprently in the urban areas.

126. The company representative was extremely conscious of the WHO Code of Marketing and felt that Nestles had now achieved a good record in Zimbabwe. In 1985, a bilingual label had been introduced on all the tins of formula. The Company provided free samples only through the Provincial Medical Department. Between January and October, 1987, 3 tons of milk had been donated. All donations were accompanied by a form requiring detailed information on the receipient of the milk, and extract of the Code (Articles 3.6.6 and 6.7).

127. Nestles produces a number of other milk products such as Nespray, Everydays, Sweet Condensed Milk, Mulo etc. Although these types of milks may be misused as a breast milk subsitute by mothers, there is no contravention of the labelling practices as recommended by the Code. Nestles also dominates the market in weaning foods with products such as Cerelac, Nestam No1 and Nestan. These are all instant baby cereal products. All are easily available in the shops.

128. There are two other companies manufacturing weaning and infant foods - Willards and Nutresco. Both were visited. Although these companies are locally based, Willards is part of a much larger conglomerate, Cairns Holdings, which has probably also interests in South Africa, although this information was not directly volunteered. Willards was established in 1946, and started producing baby foods in 1959. Three types of weaning foods are produced - Pro-nutro, Nutrine and Pro-Nutrolac. These are all instant cereal products. The representative of the company was unable to provide sales figures but stated that these foods were not a major component of the company's production. More profitable lines were items such as crisps, drinks etc. There were no immediate plans to extend the range of baby foods. The present production did not satisfy the market but the unavailability of certain imported additives and packaging materials, limited output. Sales were predominantly in urban areas.

129. Packaging was a major problem in all the companies visited, and reflected the government allocation of foreign currency. Both companies, Nestles and Willards, had no open date marketing system on their weaning foods, so that no expiry date was clearly visible to the consumer. Although both companies acknowledged that this would be desirable, the implementation of this would require the import of new machinery and packaging materials. Willards stated that packaging contributed 10% to the costs of its weaning foods.

130. There was little to add to the previous report on Nutresco products which are principally a commercially produced local non-alcoholic drink called "Mahewu." Recently, a special formulation of their product with increased protein content had been distributed through the Red Cross in some of the drought related feeding programms.

131. No obvious contraventions of the WHO Marketing Code were detected in this short mission to Harare. Both Nestles and Willards made great efforts to state their adherence of the Code. Willards had been a member of the Committee established to implement the Code in Zimbabwe. In fact, they claimed to be pioneers in that the contents of their baby foods were declared on the packet prior to 1981.

132. In the "Health for All Plan" (Ministry of Health 1986) (57), the follwoing actions to combat malnutrition are suggested:

(a) Supplementary feeding for malnourished children below 5 years of age

(b) Drought relief

(c) Consumer subsidies on essential commodities

(d) Resettlement of displaced families

(e) Growth monitoring and health education in the clinics

(f) Campaign for the promotion of breast feeding and implementation of the Zimbabwe Code

(g) Emphasis on the nutritional element of PHC

133. Targets to be achieved by 1990 in the reduction of malnutrition:

(a) 80% of children below 5 years should have weights greater than the 3rd percentile.

(b) 90% of newborns should have birthweight 2500 gm

(c) The prevalence of protein energy malnutrition should be less than 15% (currently 20-50%).

(d) There should be a reduction of anemia in pregnant and lactating mothers.

134. The formulation of a National Food and Nutrition Policy should have been completed by 1987, so that there could be the necessary coordination of activities dealing with nutrition. By 1987, there should be an adequate supply of food for malnourished children through supplementary feeding. In fact, the Child Supplementary Feeding programme, which ran from 1980-1986, had recently been curtailed. Negotiations were being pursued with non-governmental organization, the World Food Programme and USAID to restart the programme. By 1989, to ensure that all relevant government workers are trained appropriately to carry out nutrition related activities. By 1986 guidelines for institutional feeding should have been developed, and by 1987, adequate meals should be served to all patients and staff.

135. Infant feeding practices cannot be examined in isolation of the general situation of women as mothers form the inseparable half of the mother-child dyad. There appears to have been great strides since independence to improve the situation of women. The Government, in its policy of "Growth with Equity" emphasises that discriminatory practices that obstruct women's participation in development have to be removed. However, the traditional position of women in Zimbabwean society has to be examined so that achievements can be viewed in perspective.

136. Zimbabwe is a strongly patrilineal society which traditionally places little value in women's participation in activities outside the home. This has been further promoted by colonial policies whose discriminatory labour patterns were based on cheap migrant labor, and an educational system which did little to encourage female participation. Women's inferior status has had a negative aspect on almost every sphere of life.

137. Women were considered minors under the law and thus were unable to enter into contracts or inherit property in thier own right. This relegated women to the production of subsidtence crops only with over dependence on the male head of household, and no control of family income. Women also had no access to agricultural extension services. The small number of women who sought employment outside the home were a prey to discriminatory labor practices. Also the income they receive is disproportionately taxed together with their husband's income (69).

138. The participation of women in the war of liberation played an important part in paving the way for their greater participation in the development of Zimbabwe. In the past eight years there has been considerable effort to redress some of these imbalances. The Government's acknowledgement of the role of women per se and their involvement in community development has been demonstrated through the establishment of the Ministry of Community Development and Women's Affairs in 1981.

139. The labor migrant economy and emphasis on cash crop production has left women in the rural setting in a particularly precarious position. The high rate of male absenteism has forced women to take over tasks traditionally carried out by men. The introduction of cash cropping and the general land shortage in

communal areas where the bulk of the population resides, has led to an even further reduction in the land allocated to women, particularly for the more nutritious crops (e.g. beans, groundnuts). This has resulted in an unbalanced diet susceptible to protein caloric deficiency and prone to the development of malutrition.

140. 26% of the population live in urban areas. The position of women in towns is no less precarious, and may be even more so than in the rural areas. Prior to colonization, both the Shona and Ndebele were agriculturalists and pastoralists respectively. Therefore, urban areas may be considered a direct outcome of white colonialisation and industrialization. Whilst it is essential to house the African labor in town, it was not in the interests of the colonial settlers to allow 'homes' for these migrant workers, who were mostly housed in hostels. It was not until 1959, that Africans could acquire freehold property in clearly designated section of the towns.

141. Discriminatory housing policies kept the Africans as a marginal group. Until 1976, no person without a valid marriage certificate was put on a housing waiting list. Residence in the house was linked with employment, so that with unemployment or the death of the husband, there was accompanying loss of the house. Women who had no contractural capacities prior to 1982, could not rent houses (71). These early male/female rural/urban migration patterns and housing policies have led to lasting effects on the pattern of house ownership and female employment within the towns.

142. The most significant role change of the African woman in towns has been the curtailment of her role as a food producer and her reliance on her husband's income. In towns, women have a minor domestic role in comparison to rural areas, and are regarded as an economic liability rather than an asset. In a sample of one of the oldest high density areas in Harare, 63% of the women were dependent on their husbands, and only 9% were de facto head of households 67% were functionally literate. 50% were housewives, 37% were engaged in petty trading, and 12.3% had fulltime waged employment, the majority being teachers or nurses. 50% were entirely dependent on their husband's income. Thus urbanization eliminates the woman's extra-familial role leading to a lowering of status, decreased ability to influence family decisions and a precarious economic existence (71).

143. The Zimbabwean woman continues to play only a small role in employment in the formal sector, comprising 6.7% of the total work force in the non agricultural sector. There has been no significant increase between 1969-1979 except in the fields of education and health, which have been the most open to African women.

TABLE 10: Female Employment Patterns in Zimbabwe

	1969	1979
Manufacturing	4.34%	4.09%
Construction	0.58	0.27
Distribution Hotels/ restaurants	5.00	7.23
Transport, communication	0.45	0.33
Public Administration	1.52	2.57
Education	12.10	23.30
Health	37.50	47.57

Source: JASPA (1986), Women's Employment Patterns. Discrimination and Promotion of Equality in Africa. The Case of Zimbabwe

TABLE 11: Race Distribution of Female Employees

Number	African	European	Asian	Coloured	Total
Professional and technical	59%	39%	1%	1%	7663
Administration and management	12%	79%	5%	4%	1092
Clerical	24%	68%	3%	5%	20421
Sales	39%	48%	6%	9%	4403
Service	66%	26%	1%	7%	2539
Agriculture	66%	33%	-	-	1620
Production related	74%	23%	2%	2%	2079
Occupation inadequately stated	38%	47%	4%	11%	224

Source: Government of Zimbabwe (1981), National Manpower Survey, Government Printers, Harare.

144. The colonial discriminatory policies have influenced the race distribution of female employees. The African women who comprises 95.5% of the female population, only contributes 30% of the trained female work force (see Table 13), in comparison to the European women (2.9% of the population) who comprises 54% of the trained female work force. Only 0.4% of the total African female population is employed in professional, skilled or semi-skilled categories (72). This relegates women to unskilled jobs, such as casual and seasonal labor in for example food processing industries, where they can be easily exploited.

The women in the canning industries are invariably employed at the lowest grade. Payment is sometimes on a task basis without overtime payment. This means that often they do not earn the minimum wage. There are no benefits for women with family responsibilities, and none of the employees utilized the two-half hour breast feeding periods. Few companies provided canteen facilities and accomodation, which was only available for permanent staff and of low standard. In general, women did not participate in labor union activities which may put them in a stronger position to bargain for improved working place standards (64). The minimal opportunities for employment in the formal sector have pushed women into the informal sector, where they are mainly engaged in food peddling and handicrafts, leading a very marginal existence. They are also susceptible within the informal sector to exploitation by entrepreneurs.

145. There are no reliable statistics on the level of illiteracy. Although several reports indicate the level of education of heads of households, this is not seggregated by sex. In 1984, 34.9% of all household were headed by women. 25.2% of household heads had no formal education; and 18.1% had up to three years of schooling (39). The 1982 Census revealed that 29% of persons above the age of 15 years had not attended school, and 44% of women had not completed Grade 3. Women consistute 65% of those above the age of 15 years who had never been to school. Younger women were clearly more educated than older women.

TABLE 12: Illiteracy Rates Amongst Women by Age and Area of Residence

Age Groups	Rural	Urban	Total
15-19	12.9%	8.3%	11.2%
20-24	31.7	14.1	25.0
25-29	38.0	14.3	28.7
30-34	34.4	12.9	27.4
35-39	35.2	18.2	30.9
40-44	44.4	25.7	38.6
45-49	46.9	38.7	45.6
	32.4	14.6	26.3

Source: Zimbabwe National Family Planning Council and Westinghouse Public Applied System (1985), Zimbabwe Reproductive Health Survey, 1984.

146. The government has made its position clear with the provision of education to all its citizens. Education to all its citizens. Education is viewd as a basic need and a fundamental right of each child in Zimbabwe and is perceived as a facilitator for bettering the living conditions of its citizens (74).

147. The government, through the Ministry of Education, has embarked on a massive plan to facilitate access to education of children as well as illiterate adults. Expansion of facilities has been made. This is demonstrated by the increase in enrollment figures. In 1979, 820,000 children were attending primary school. This has increased almost four times to 2,229,396 in 1985. There has been an even larger relative increase in secondary school enrollment from

66,000 in 1979 to 495,766 in 1985 (65). There have also been concerted efforts to improve adult literacy. The National Literacy Campaign was launched in July 1983. One hundred and ten fulltime literacy coordinators have been trained and they work with regional education officers and community development officers in the training of adult literacy tutors. By the end of 1983 almost 6,000 voluntary literacy tutors had been trained and there were over 2,400 literacy groups with approximately 65,000 adult learners (38).

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ETHIOPIA

149. Ethiopia is located in the "Horn of Africa" between latitudes 4° and 18° and longitude 34° to 48°. The country has an area of 1,224,000 square km. Highland areas constitute 44% of the country.

150. The population was 42,184,996 in 1984, when a census was carried out. This makes Ethiopia the third most populated country on the continent. 47.5% of the population are below the age of 14 years. 88% live in highland areas, where 95% of the cropped lands are. The mean population density is 27 persons per square km. (range 7 - 60 persons) (75).

151. The altitude variation is extremely high ranging from 126 meters below sea level in the Danakil Desert to 4620 meters in the Semien Mountains. There are two rainy seasons, namely the main rains (June-September) and the small rains (March - April). As a result there are two productive periods, the Meher (main) and the Belg (small). Belg production contributes only about 0.3% of the annual food supply (76). Ethiopia has experienced devastating droughts in the last 15 years. This is not a new phenomenon in the country's history, where periodic droughts have been a recurrent phenomenon.

152. Ethiopia is one of the least urbanized countries on the continent, with only 13.3% of its population living in "urban" centers. Urban centers are defined as having more than 2,000 persons. In the majority of the regions less than 10% of the population live in urban areas. 50% of all the urban areas have population between 2000 - 5000 persons. Addis Ababa constitutes 33% of the total urban population. The urban growth rate is estimated to be 5%, so that the urban population will double within 14 years. Unlike many other African countries, there is a higher rate of migration of women to the towns than men (75).

153. The population of 42,184,996 persons makes Ethiopia the third most populated country on the continent. Health service indicators show that health service impact is low. Infant mortality is high, life expectancy relatively short and there is a fast population growth.

TABLE 1: Health Service Indicators

Population	42,184,996
Age distribution - 14 years	47.5%
- 5 years	17.8%
Infant Mortality Rate	144/1000
Crude Birth Rate	46.9/1000
Total Fertility Rate	6.8
Population growth rate	2.9%
Life expectancy at birth	46 years
Access to protected water	6%

Source: Central Statistical Office (1985), Population Situation in Ethiopia, 1984, Central Statistical Office, Addis Ababa

154. The present national health policy, which places great importance on the provision of essential health care, originated from the declaration of the National Democratic Revolutionary Programme in 1976. The basic principles are consistent with the Primary Health Care approach as outlined by the Alma-Ata Declaration of 1978. A 10 Year National Development Plan was proposed in 1985 (1985-1994) which advocates inter-sectoral collaboration and coordination with regards to health development at the primary level.

155. As in all developing countries, the main causes of infant mortality are neonatal problems, acute respiratory tract diseases, diarrhea and malnutrition. In the maternal mortality study in Addis Ababa, 38.5% of the babies who died had died within the first 8 days of life, 11% died between 8 - 28 days and 49% between the first month and one year of age (80).

156. Table 2 shows the causes of child mortality among the different regional groups. The data also demonstrates the difficulty in obtaining accurate information, with a large percentage of deaths due to unknown causes. The use of traditional medicine is common. 41.9% only sought medical attention after home remedies had failed, and 58.1% dispensed only traditional treatment (81).

TABLE 2: Child Mortality (0 - 5 Years) by Regional Groups

Ethnicity	Total Children < 5 yrs	% Death	CAUSES Malnutrition	Diarrhea	Fever	Measles	Unknown
Amhara	133	-	-	-	-	-	-
Oromo/Shoa	103	-	-	-	-	-	-
Oromo/Arsi	154	4.5	-	28.6%	28.6%	-	42.8%
Kembata-Hadiya	136	4.4	16.7%	33.3	-	-	50.0
Guraghie	134	8.2	27.3	18.2	18.2	18.2	18.2
TOTAL	660	3.6	16.7	25.0	16.7	8.3	33.3

Source: MOH (1986), Family Health Project, Beneficiaries Assessment (Sociological Survey), submitted to the Population, Health and Nutrition Department, World Bank, 1986.

157. The major problems encountered in the implementations of the health sector plans (79) were:

(a) Difficulty in the construction of health institutions.
(b) Manpower shortage.
(c) Low per capita expenditure on health.

158. The health system has six tiers, beginning with community health service, health stations (1850), health centers (140), rural hospitals, regional hospitals and central hospitals. Community health services are implemented through Community Health Agents and Traditional Midwives. Between 5,000 and 6,000 Community Health Agents have been trained but there have been severe constraints in their effective deployment. There has been a high attrition rate (40%) probably as a result of lack of remunerative support within their communities, shortage of equipment and drugs, and lack of supervision. The training of Traditional Birth Attendants started in 1979. 5,000 have been trained so far.

159. The Expanded Programme of Immunization (EPI) was launched in 1980. In 1985 a massive immunization campaign was launched. Figures from the Ministry of Health indicate that 30.9% received BCG, 19.9% DPT3, 15.4% Polio and 21.4% measles (MOH unpublished data). The 1985 PHC review (79) identified a high drop rate in the EPI programme. Reasons for the high immunization failure included - lack of information to mothers (25%), lack of motivation (10%), logistic obstacles (32%) and wrong vaccination techniques (33%).

160. Malnutrition is a serious problem in Ethiopia, with 2.5% of children showing severe proetin energy malnutrition and between 30-60% showing moderate malnutrition (82)

TABLE 3 Frequency of Malnutrition by age (Total review sample PHC Review (n = 22,410)

Age (months)	Weight for Age			
	80%	79 - 70%	69 - 60%	60%
0 - 12	30%	14%	4%	2%
13 - 24	64	24	9	3
25 - 36	64	25	8	3
37 - 48	65	25	8	2
49 - 60	62	29	7	2
TOTAL	67	23	7	3

Source: MOH (1985), Primary Health Care Review.

TABLE 4: Distribution of Malnutrition by Province (n = 3068)

Region	Weight for Age			
	≥ 90%	90 - 81%	80 - 61%	≤60%
Harerghie	31.4%	21.4%	39.3%	7.8%
Gojjam	33.3	36.5	26.7	3.5
Arssi	27.3	27.7	37.1	7.9
Wollo	19.9	17.5	47.5	15.1
Gamo Gofa	13.6	27.8	53.3	5.3
Kaffa	30.7	24.0	40.8	4.5
Illubabor	21.7	20.5	42.3	15.5
Shoa	25.8	25.2	42.0	7.0

Source: Kidane, Y. (1988) Traditional and Modern Feeding Practices in Ethiopia, paper to be presented at the 2nd International Conference of the Association for the Study of Food and Society, May 1987, Washington D.C..

161. Table 5 apart from highlighting the high prevalence of malnutrition also shows that the degree of malnutrition varies throughout the country, and does not parallel the agricultural output in the regions. Both Gojjam and Shoa are surplus producing regions but there is a high prevalence of malnutrition. However, in Bale, where only 78% of the required energy is produced, there are comparatively very low levels of malnutrition. Further studies need to clarify these disparities. In a study being carried out by the Ethiopian Nutrition Institute (ENI) on the effects of Khat, it would appear that there was no difference in the prevalence of malnutrition among children of khat, growing families who have an income almost four times greater than the other farmers in the region (82).

TABLE 5: Distribution of Malnutrition - Weight for Height - Regional Figures

Region	≥90%	80 - 89%	70 - 79%	<70%
Arssi	77.6%	15.4%	5.2%	1.2%
Bale	96.0	2.7	1.3	0.0
Gojjam	42.2	21.9	19.0	16.8
Gamu Gofa	82.9	11.4	5.2	0.5
Gondar	73.0	17.3	4.8	4.8
Harerghie	67.1	25.4	6.3	1.1
Illubabor	68.6	19.4	6.2	5.7

Table 5 (cont'd)

Region	90%	80 - 89%	70 - 79%	70%
Kaffa	72.2	23.1	2.8	1.9
Shoa	64.2	24.0	8.9	2.9
Sidamo	73.4	17.3	5.1	4.2
Wollega	72.1	18.3	7.6	2.4
Wollo	65.1	22.5	6.4	5.4
TOTAL	67.5	19.6	7.99	5.0

Source: Source as above.

Table 5 shows a high percentage of wasting in the rural areas. The overall magnitude of malnutrition(90% weight/height) is 33% with 5% being severely malnourished (70% weight/height).

162. Malnutrition, although occurring in the first year of life in some areas, is worst during the second and third years. This can be explained by:

(a) The late introduction of weaning foods
(b) Recurrent weanling diarrhea
(c) Widespread use of bottle feeding in most urban areas
(d) Short birth intervals
(e) Lack of nutrition monitoring
(f) Poor sanitation
(g) Man-made and natural calamities

The magnitude of malnutrition expressed in Tables 4, 5 and 6 are those associated with periods of normal production. During severe food crisis such as the 1984-1985 famine, the magnitude of malnutrition increased drastically.

163. General feeding practices vary with each regional group. These variations are a result of the cultural differences between the groups. The main staple crops are cereals such as teff (Eragrostic abyssinica), maize wheat, barley, sorghum, pulses, lentils, root crops, enset etc. In the north, central north-western, east and South-eastern parts of the country, these cereals, particularly teff, are consumed in the form of a pancake (injera) or a bread with pulses as a sauce. Meat and vegetables are only consumed rarely despite the fact that Ethiopia has the largest livestock population in Africa (33). In the south and south-western parts of the country, the staple diet is enset, supplemented with tubers and cereals. In these areas enset covers 60 - 70% of the caloric requirement. It has a high bulk and relatively low protein content, which makes it a poor food for weaning diets (32).

TABLE 6 : Protein and Iron content of some Cereals and Enset

Type of cereal	Protein/100gms	Iron/100gms
Teff	11.1	18.9
Sorghum	7.1	7.8
Wheat	10.3	7.5
Barley	9.3	10.2
Maize	8.3	4.2
Enset	3.6	3.7

Source: Kidane, Y. (1988), op.cit.

164. Most of the protein supply in the diet is supplied by vegetable foodstuffs. Despite the decreasing caloric intake, this protein component seems to have been insufficient. Over the past 10 years the mean daily intake has decreased, as shown in Table 7, which represents so-called normal periods. During famine situations, the nutrient supply is extremely low.

TABLE 7: Energy, Protein and Fat Supplies per capita per day 1972 - 1985 '84

	1972	1973	1974	1975	1976	1977	1983/85
Kilocalories	1884	1894	1845	1768	1841	1793	1692
(number)	88.7%	89.0%	87.0%	84.0%	86.8%	84.6%	78.8%
Protein (gm)	64.0	63.3	60.6	58.3	61.7	59.7	55.8
Fat (gm)	30.1	29.6	28.6	28.1	29.1	28.2	25.2

As indicated in Table 7,the supply of kilocalories is at mere survival level, although the relative composition appears reasonable. Food supply is distributed unevenly throughout the different regions.

165. There are a wide variety of infant feeding practices. Although, breast feeding is the norm in rural areas. There has been an alarming trend towards bottle feeding with breast milk substitutes in urban areas.

TABLE 8: Breast Feeding Practices in Ethiopia

Duration of breast feeding	Urban elite	Urban poor	Rural
None	8.6%	2.7%	-
Birth - 6 months	57.0%	91.8	100.0
Birth -12 months	41.1	85.5	95.9
Birth -23 months	28.8	78.6	95.9

Source: Wolde-Gebriel, W. (1981), The Breast Feeding Situation in in Ethiopia, Assignement Children, Vol. 55/56

166. Attitudes towards breast feeding versus bottle feeding showed cause for concern. (Table 8).

TABLE 9: Knowledge about Breast Feeding

	Urban elite	Urban poor	Rural
Breast feeding is better for the child	76.6%	72.0%	16.2%
Bottle feeding is better	1.9	4.4	15.5
No difference	27.5	23.6	68.2

Source: Wolde-Gebriel, W. (1981), op.cit.

167. Between 1976-1977, 24 transnational corporations were marketing milk products in the country. Out of the 46 products sold, 23 were infant formulas. In 1980, 200 tons of infant formula was imported (84). More recent figures are shown in Table 10

TABLE 10: Import of Milk Related Products 1982-1986

Type	Amount (Tons) 1982	1983	1984	1985	1986
Milk in powder/ granules for infant/ invalid food	4,100	3,300	3,000	29,700	18,400
Milk in powder/ granules	1,800	2,400	700	5,100	21,300
Milk or cream preserved/sweetened	-	60	50	-	-

168. Currently several types of breast milk substitutes are available in the supermarkets and small retail shops in many urban areas. Feeding bottles are also easily available. Prices of breast milk substitutes average US$2.25 per tin. The monthly cost of keeping a baby totally on breast milk substitutes is about US$ 12.00 per month. With a mean per capita annual income of US$ 148, this makes the use of breast milk substitutes way beyond the means of most people. However, their use is widespread. Price constraints lead to the over dilution of formula milk, with resultant malnutrition. Support for the WHO Marketing Code from the government has been in the form of a ban on advertising on the mass media and active health education on the promotion on breast feeding. There have been no recent studies in large urban areas to assess the impact of formula. Discussions with the Ethiopian Domestic Distribution Corporation revealed that Nestles products were imported in the great amounts in comparison to other companies. In 1986, approximately 200 tons of milk products were imported to the amount of Birr 2,404,686 and distributed through the Retail Corporation. Of this, approximately 100 tons was milk formula. The majority of baby weaning food was also obtained from Nestles (Cerelac), to the amount of Birr 1,498,386.

169. The situation in rural areas is more encouraging. Table 11 shows that the mean length of breast feeding is 25.1 months in different regional groups. However, malnutrition is prevalent in these regions due to the late introduction of supplementary foods.

TABLE 11: Length of Breast Feeding in Months by Regional Groups

Breast feeding (months)	Amhara	Shoa Oromo	Arssi Oromo	Kembata-Hadiya	Guraghie	Total
≤ 6	1.8%	-	6.7%	-	-	1.7%
7 - 12	10.5	8.3	15.0	5.0	1.7	8.1
13 - 18	1.8	-	8.3	8.3	1.7	4.0
19 - 24	43.8	43.3	51.7	26.7	40.7	41.2
25 - 30	1.8	13.3	-	8.3	23.7	9.5
31 - 36	26.3	31.7	11.6	48.3	28.8	29.4
37 - 48	8.7	3.3	5.0	1.7	3.4	4.4
MEAN (months)	25.2	25.8	20.6	27.4	26.8	25.1

170. The main supplementary foods are gruel, porridge, fenugreek and cow's milk. In some cultures, such as the Borena nomads, cow's milk is introduced immediately after birth. However, semi-solid foods are only introduced late around one year of age.

TABLE 12: The Introduction of Supplementary Foods in Months by Ethnicity

Age of starting SF. (mnths)	Amhara	Shoa Oromo	Arssi Oromo	Kembata-Hadiya	Guraghie	Total
≤ 6	45.6%	50.0%	35.0%	46.7%	94.9%	54.4%
7 - 12	42.1	38.3	51.7	38.3	5.1	35.1
13 - 18	10.5	11.7	11.7	13.3		9.5

Source: Constable, M. and Belshaw, D.A. Summary of Major Findings and recommendations from the Ethiopia Highlands Reclamation Study Paper presented at the National Workshop on Food strategies for Ethiopia, Alemaya, December 1986.

171. Generally weaning from the breast is sudden and may be encouraged by putting bitter or unpleasant substances, such as hot pepper or cow dung, on the nipple. Sometimes the child is sent away to the grandmother. These type of practices often lead to psychological trauma in the infant after having had such close and prolonged contact with the mother (82).

172. Food taboos play an important role in some cultures. Eggs and chicken are considered dirty by many ethnic groups (82). Fish, which is plentiful in many areas is not eaten to its maximum potential. There are complex fasting rituals associated with both the Ethiopian Coptic Church and the Muslim religion.

173. In some ethnic groups colostrum is not given to the baby. After birth, many cultures give fresh butter to the newborn as a laxative to "clean out the baby's stomach." This practice is dangerous running a risk of producing lipoid pneumonia. There are certain diseases associated with food restrictions. Measles is thought to be caused by spirits and specially prepared tasty foods are left at the bedside of the child for the spirits. The child may not be given white fluids such as breast or cow's milk as this is thought to worsen the fever. Diarrhea is often also managed by withdrawal of food and drink, thereby aggravating the effects of dehydration. These harmful feeding practices contribute to increased morbidity and mortality among children.

174. There is obviously a need to ameliorate the situation of malnutrition in the country. Although this has been aggravated by man-made and natural calamities, there is still an underlying huge reservoir of malnutrition. Recommendations from the Ministry of Health include (79):

(a) improved nutritional surveillance
(b) improved access to supplementary feeding
(c) clear national policy of food and nutrition
(d) more efforts on the prevention of malnutrition
(e) standardised growth charts in all health institutions
(f) the integration of nutrition into other services with improved community awareness.

175. The Ethiopian Nutrition Institute (ENI), which was founded in 1962, plays an important role in many aspects of applied nutrition and research into nutritional problems within the country. It's activities range from food analysis, food quality control, nutritional surveys, training and the development of educational materials (86). ENI in conjunction with funds from the Italian Government through WHO and UNICEF, is involved in a Joint Nutrition Supplementary Programme, which started in Sidamo in 1985. The project aims to improve health and nutrition in a community by expansion of the health infrastructure, the promulgation of nutrition education activities in schools; health and nutrition pamphlets; material support for ten day-care centers, and the distribution of improved seeds and fertilisers to local farmers (36).

176. ENI spearheaded the development and production of "Fafa" which was launched in 1967. Faffa is composed of wheat 57%, chick peas 10%, defatted soy flour 10%, D.S.M. 5%, sugar and iodized salt 9%, vitamins and minerals 1%. The production of this weaning porridge, which is recommended for children between the ages of 4 months and 4 years, is carried out on a commercial basis, at the Faffs Foods Plant in Addis Ababa, operating under the Ministry of Industry, through the Ethiopian Food Corporation. Apart from Faffa, the Plant in producing Dube flour, an enriched wheat flour; Edget, a fortified whole milk (with additional wheat flour, sugar, iron and vitamins), and a new product

called Cerifam. Edget is marketed as a family milk and not considered a breast milk substitute. Cerifam contains wheat flour, dry milk, soya flour, sugar, vitamins and minerals, with a protein content of 7gms% and carbohydrate contnet of 61%, yielding 395 cals per 100gms of food. This pre-cooked baby food has been produced as direct competition to the Nestle's product Cerealac, which is easily found on the market. Sales figures for Cerifam have been disappointing, despite a price of only about 25% that of it's competitive Nestle's product. There does not appear to have been any government regulation to the continued import of the Nestle's products both weaning foods, breast milk substitutes and powdered whole milk.

177. Over the past seven years, total production has increased almost three fold. (Table 13). Sales of the Faffa Food Plant go to international relief organizations, government institutions, and regional distributors. These figures are shown in Table 14. Commission agents are private distributors, operating in Wollo and Wollega only who sell on a commission basis. The necessity for the use of these agents is because of transport and storage problems in both these regions.

TABLE 13: Production in Tons of Faffa and Dube Flour

Year	Total	Faffa Relief	Faffa Commercial	Dube flour
1979/80	8,000	3,500	500	3,200
1980/81	10,000	3,400	600	5,000
1981/82	11,000	2,700	550	7,200
1982/83	13,000	2,400	700	9,300
1983/84	14,000	2,700	700	10,000
1984/85	19,000	5,200	250	11,000
1985/86	23,000	4,600	350	15,600

178. The production of weaning food at a village level is also an encouraging development. A pilot project is being undertaken in Gojjam where 20 villagers are involved in the production of 600 kgs of weaning food per day. This is distributed to the surrounding villages.

TABLE 14: Sales of Faffa Products to All Cost Carriers 1981-1986*

Cost carriers	1981/82	1982/83	1983/84	1984/85	1985/86
International organizations	4,634,998	5,499,057	7,237,219	14,231,786	11,044,600
Sales regions	3,666,972	5,401,156	4,472,637	1,590,812	6,598,122
Commission agents	674,198	1,023,827	809,927	124,384	651,512
Government organizations	2,473,131	2,372,560	2,067,448	1,812,073	4,481,078
Interplants			1,752,050	488,885	667,251
Others	1,333,240	1,412,318	887,739	1,010,687	1,998,770
TOTAL	12,782,540	15,708,918	17,227,920	19,266,627	25,442,333
Growth by %		+23.0%	+10.0%	+12.0%	+33.0%

* All figures in Birr

TABLE 15: Sales of Faffa Products to International Organizations for Relief Programmes 1981-1986 (in tons)

Organizations	1981/82	1982/83	1983/84	1984/85	1985/86
1. UNICEF	75.71	970.73	1,181.7	1,469.0	1,758.48
2. World Vission	1,588.0	707.98	556.5	2,199.65	488.50
3. ERCS/LORCS	30.0	-	-	1,544.7	-
4. ERCS/ICRS	734.75	1,620.35	2,980.5	5,673.45	593.0
5. ERCS/GRCS	985.0	720.0	145.0	-	-
6. ERCS	55.7	343.45	1,110.6	-	2,032.0
7. CPDA	381.0	862.0	809.7	1,876.39	3,332.0
8. OXFAM	-	-	-	90.0	-
9. Catholic Secretariat	234.0	230.3	103.0	304.0	125.2
10. Padda Barna	170.0	-	-	-	84.8
11. LWF	66.0	92.0	148.5	313.6	3,050.0
12. PRC	32.0	8.9	85.98	-	-
13. Other mission groups	166.64	-	-	748.3	246.5
TOTAL	4,292.8	5,383.71	7,213.48	14,219.09	12,288.58
TOTAL VALUE (in Birr)	4,634,998	5,499,057	7,237,220	14,231,785	11,044,600

The increase in distribution through relief agencies reflect the famine situation in the country, particularly during 1983-1985.

179. Ethiopia has an estimated poulation growth of 2.9% and a total fertility rate of 6.8. By the time women have reached the peak of their reproductive lives, they have had a mean of 9 pregnancies. 8.2 deliveries and 6.3 surviving children (80). Contraceptive usage is very low (3.8%) (Ministry of Health, unpublished data 1987). In the Family Health project carried out in 5 sites, most of the regional groups wanted large families - Kembata-Hadiya 8.4 children, Amhara 8.3, Guraghie 7.4. children (81).

180. Knowledge of child spacing was also poor, with only 28.8% of the men and 20.8% of women aware that family size could be controlled (81).

181. However, it is interesting to note, that despite the absence of modern contraceptive methods, the mean birth interval in the groups studies was 30.6 months (81).

182. In a country of such regional diversity, it is difficult to generalise on the situation of women. Women in Ethiopia are generally responsible for all domestic chores, the fetching of water and collection of firewood, and in most cultures for food storage and food processing. In some groups (Guraghie and Kembata-Hadiya) they also sell any surplus at the market. Among the Amhara and Tigre, the women are responsible for dairy husbandry and the processing of milk products.

183. Customarily, women were accorded low esteem in Ethiopia. Economically the role of rural women in pre-revolutionary Ethiopia could be summoned up in one phrase 'tenant's tenant". In a system where a few strong landlords owned the land, with few women among them, the fate of most women was tied to their "tenant" husbands, but worsened by the fact that the "tenant" husband was a "master" at home (87).

184. The Civil Code provided that there would be no sexual discrimination with regards to the inheritance of land. Despite this clear provision, traditional laws were different. The Oromo women did not inherit land, whereas Amahara women enjoyed considerable property and inheritance rights.

185. The 1974 revolution brought about considerable changes for women by their participation in mass organizations and their improved access to education. The creation of a national womens association has assisted in the pooling of resources and coordination of efforts. It has created self-confidence amongst women and has given them a forum for discussion of problems they encounter. The achievements of REWA in the eight years since its formation include political and ideological work, training and related activities particularly in the field of literacy and job creation, and the formation of day care centers.

186. Ethiopia is predominantly an agrarian society, and thus the non-agricultural sector is small. However, the role of women in the agricultural sphere should not be under-estimated. Table 16 shows the number of women employed in the formal wage sector.

TABLE 16: Employment in the Formal Wage Sector

	1970		1981	
	Public	Private	Public	Private
Number of women employed	9,119	39,708	50,023	4,628
Total employment	92,837	176,818	319,924	20,670
% female	9.8%	22.5%	15.6%	22.4%

Despite the fact that the formal wage sector is small, women do make up quite significant number of the workforce.

TABLE 17: Female Employment by Categories in the public and private sectors

	Public sector		Private sector	
	1970	1981	1970	1981
Professional/technical	13.2%	2.3%	22.8%	26.4%
Administrative/management	0.9	2.8	4.2	3.7
Clerical	10.6	22.3	23.5	16.7
Sales	9.1	11.2	6.0	27.3
Service	11.8	21.9	44.1	22.3
Farm	0.1	6.6	2.0	10.0
Industrial	8.0	18.6	26.0	23.3
TOTAL	9.8	15.6	22.5	22.4

187. In comparison to the other countries in this report, migration to towns is higher among women than men. Out of a total of 86,059 job seekers, 49.8% were female. Of these the vast majority of women were illiterate (55.5%), thus restricting female employment predominantly within the unskilled categories (90).

188. In the textile industry, 50% of the workforce are women. The Labor Law allows 45 days maternity leave with full pay. Otherwise, under the current legislation, there are few other special provisions for women in the form of protection of working hours, and facilities for care of the children. The Labor law is undergoing revision, and possibly an extension of maternity leave will be considered.

TABLE 18: Education of the Population above the age of 10 years

	Male	Female
Primary education	39.2%	59.9%
Junior secondary	13.6	17.0
Secondary	20.8	19.0
Post-secondary	8.1	4.3

189. Fewer opportunities for education are a major problem for women seeking employment. In 1970, only 6% of the country was literate. At the time of the revolution, this was estimated to be 13.3%. In 1979, following the launching of the National Literacy Campaign, this increased to 26.8%. In 1983, the overall literacy in the country is 62.4%. The majority of the participants in the literacy campaigns have been women (75). Table 21 shows the percentage of the population above the age of 10 years and their educational levels. There has been a threefold increase in primary school registration since 1974.

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